Minimisation of the Expected Cost of Error in EU State Aid Enforcement

Nowak-Salles Anna

Thesis submitted for assessment with a view to obtaining
the degree of Doctor of Laws of the European University Institute

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Department of Law

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I Anna Nowak-Salles certify that I am the author of the work "Minimisation of the Expected Cost of Error in State Aid Enforcement" I have presented for examination for the Ph.D. at the European University Institute. I also certify that this is solely my own original work, other than where I have clearly indicated, in this declaration and in the thesis, that it is the work of others.

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I confirm that chapter 1, Section 3, draws upon an earlier article I published: Anna Nowak-Salles, 'Evidence Requirements in the State Aid Compatibility Assessment' (2018) 17 European State Aid Law Quarterly

I confirm that chapter 2, Section 5, draws upon an earlier article I published: Anna Nowak-Salles, 'The Optimal Assessment Rule for EU State Aid Assessment' (2020) 43 World Competition.

I confirm that chapter 4, Sections 2.2. and 3.2., draw upon an earlier article I published: Maria Segura Catalán, Marianne Clayton and Anna Nowak-Salles, 'Third Party Rights and the State Aid Procedures Revisited by the European Courts: An Ever-Sounder State Aid Control' (2019) 10 Journal of European Competition Law & Practice

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Thesis summary

This thesis examines substantive and procedural EU State Aid Law from the angle of accuracy in assessment of State measures by the Commission under the notification procedure and, to a lesser extent, by national authorities under the General Block Exemption Regulation. It adopts an economic analysis approach, within the framework of which it identifies the components of the expected cost of error (the probability of error multiplied by its cost) and makes suggestions on how to bring that expected cost down without significantly increasing enforcement costs.

In order to lower, *ex ante*, the expected cost of error in Commission's assessment, it seems essential to separate the criteria of compatibility assessment applied under the preliminary examination on the one hand, and the formal investigation procedure on the other hand. It is necessary in order to overcome the informational asymmetries, exacerbated by the procedural design of the preliminary examination. This proposition becomes particularly salient because the least costly type of error, on the side of which it could be preferable to err, may not be reliably identified in State aid law.

In order to lower, *ex post*, the expected cost of error, a well-functioning error correction mechanism is necessary. In that respect, the action for annulment, especially the one that allows to attack decisions not to open a formal investigation procedure, presents an interesting potential. While softer rules for *locus standi* in State aid are still needed, the recent developments in the Court's case-law look promising for competitors.

Finally, the extension of the GBER allows to free Commission's resources to more accurately assess the remaining measures, but it must be guaranteed that national authorities correctly qualify measures under the exemptions. The significant efforts to simplify the GBER and to educate national enforcers are assessed positively.

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Abbreviations

AG – Advocate General at the Court of Justice of the European Union

CJEU – Court of Justice of the European Union

EC/the Commission – European Commission

EEAG – Communication from the Commission - Guidelines on State aid for environmental protection and energy 2014-2020, OJ C 200, 28.6.2014

EU – European Union

GBER – General Block Exemption Regulation (Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 214, 9.8.2008)

RAG – Communication from the Commission - Guidelines on regional State aid for 2014-2020, OJ C 209, 23.7.2013

RDI Framework – Communication from the Commission - Framework for State aid for research and development and innovation, OJ C 198, 27.6.2014

RR guidelines – Communication from the Commission - Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, OJ C 249, 31.7.2014

SAAP – State Aid Action Plan

SAM – State Aid Modernisation

TEU – Treaty on the European Union

TFEU – Treaty on the Functioning of the European Union

Introduction

This thesis is concerned with accuracy in State aid enforcement, and with this aim it explores and evaluates the elements of the expected cost of error in assessment: the probability and the cost of error. Its main focus is on the European Commission and, to a lesser extent, on national authorities enforcing State aid law. The idea for this research work is born from the observation that less than 1% of State aid decisions form the object of judicial review by the Court of Justice of the European Union. This discovery led the author to the reflection on the accuracy in assessment of State measures by the Commission: does the lack of judicial review confirm the accurate and uncontroversial character of State aid decisions or, on the contrary, if for some reason the judicial review fails, do errors remain in Commission's decisions forever without anyone realizing? An inquiry into the judicial review allowed to reject the first hypothesis and ask concrete questions about the potential volume and influence of errors on effectiveness of State aid enforcement.

Intuitively, any prospective analysis is prone to errors.[1] This propensity becomes even more tangible when the potentially problematic measures are adopted by the same Member States who create the legal framework for State aid control and have a predominant role in the administrative procedure. This intuition transformed itself into research, whose purpose was to examine the existing guarantees that the assessment of State measures is accurate and, on that basis, to offer some solutions to reduce the number of decisional errors. In more technical terms, the research was structured around the notion of the expected cost of error, which corresponds to the probability of error multiplied by its cost.

The error analysis undertaken in this thesis relies on the assumption that error is undesirable inasmuch as it hampers achievement of objectives of EU State aid policy and hence reduces the benefits derived therefrom. For instance, the Commission or a national State aid authority may assess whether an aid incentivises its recipient to make a desirable investment, or in other words, whether without the State's help the investment would not take place. If there's error in assessment, the aid may be considered to give incentives to invest while in reality, the undertaking would make the investment in any case. Such unnecessarily granted aid will cause distortions on the market that State aid law is designed to prevent. Alternatively, if the aid is

[1] Alan Devlin and Michael Jacobs, 'Antitrust Error' (2010) 52 William & Mary Law Review 75, 105.

mistakenly prohibited, such a decision deprives the market of a desirable investment, although granting of good aid lies in the interest of both EU and its Member States.

With this starting point, the thesis verifies whether it is ensured that errors are rare, cheap or effectively corrected so that their expected cost is minimised. The probability of error may be reduced by designing a better substantive or procedural law; the costs of error may be reduced by means of judicial review, provided that access to the Court and reliable assessment by the judge are ensured. This thesis analyses the various elements that reflect the currently existing situation, and then examines potential modifications of the law, decisional practice and case-law, which could be applied in order to reduce either probability or the cost of error at any stage.

This methodological framework, drawing from the economic analysis of law, is expressed in the following research question: *What are the components of the expected cost of error in State aid assessment and how to decrease this expected cost?*

Literature review

The above-defined error analysis is not an angle of analysis adopted in the existing literature and the research question has not been either asked or answered in the past. However, when discussing accuracy in general (e.g. costs and probability of errors) as well as analysing the individual components of state aid analysis (assessment of procedural rules, actions for annulment), one may look into different types of literature in order to conclude that there exists a gap this thesis may fill.

In the first place, there is no literature on State aid law and procedure dealing, explicitly or implicitly, with errors in enforcement, even if certain related issues have been partially covered. The literature critical of the EU state aid regime seems to go in two directions. The first one is a critique of substantive provisions, which points at difficulties and inconsistency in application of different notions, such as those of "common interest", "market failure" or "incentive effect", in enforcement by the Commission[2] as well as in the GBER.[3] However, aside from intuitive dissatisfaction with the existence of notions that are unclear and difficult to apply, no author

[2] E.g. Sanoussi Bilal and Phedon Nicolaides, 'An Appraisal of the State Aid Rules of the European Community: Do They Promote Efficiency?' (1999) 33 Journal of World Trade 97, 9–13; Leigh Hancher, Tom Ottervanger and Piet Jan Slot, *EU State Aids* (Sweet & Maxwell 2016) 2–017; Massimo Merola and Marie Debieuvre, 'The New Approach to State Aid: Contributions and Limits Form Case Law of the European Courts', *Competition law and economics : advances in competition policy enforcement in the EU and North America* (2010) 400–405.
[3] Ulrich Soltesz and Felix Schatz, 'State Aid for Environmental Protection The Commission's New Guidelines and the New General Block Exemption Regulation' (2009) 6 Journal for European Environmental & Planning Law.

went as far as to concretely explain the reasons for which such notions are undesirable, nor linked them to their impact on the accuracy in decision-making. This gap is addressed by this thesis, by analysing the optimal complexity of assessment criteria in light of procedural law of State aid.

The second direction is the criticism of the administrative procedure before the Commission. However, this critique is carried out mainly from the private parties' point of view – the authors point at their insufficient participation, imbalance between rights and obligations and lack of procedural guarantees, leading to legal uncertainty.[4] However, these considerations hardly overlap with the idea of this thesis, which is based on the purely instrumental role of third parties in the proceeding, so that the procedural shortcoming observed by other authors are certainly the starting point, but pull the analysis in the direction of fundamental rights. Moreover, even though it is acknowledged that an enhanced participation would improve decision-making by providing the Commission with the necessary information, and that the administrative procedure could be improved,[5] these arguments have not been sufficiently developed, especially with regard to why and how involving third parties could tangibly increase the quality of outcomes of State aid assessment.

Third, the literature employs rather a general, abstract approach to State aid law, without referring to statistics and data on the decisional practice of the Commission, national authorities and the courts.[6] However, this insight into the practical dimension of State aid enforcement is crucial to identify the nature of the "error problem", estimate its scale and draw employable conclusions. Indeed, the strong disproportion between positive and negative, as well as Phase 1 and Phase 2, decisions determines priorities in tackling the probability of error, its costs and error correction mechanisms. Moreover, the prevailing interest visibly is on complaints, recovery and in general illegal aid, while the present work takes account of the fact that unnotified aid amounts only to around 15% of all State aid enforcement. Hence, this thesis fills this gap by placing focus on the biggest (acceptance in the preliminary examination) and not the most controversial but marginal (illegal aid) part of State aid enforcement.

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[4] E.g. Juan Jorge Piernas López, *The Concept of State Aid under EU Law : From Internal Market to Competition and Beyond* (Oxford University Press 2015); Thomas Jaeger, 'The Inquisition Retakes Brussels (Via the New Procedural Regulation)' (2013) 12 European State Aid Law Quarterly 441; Francois-Charles Laprévote, 'A Missed Opportunity? State Aid Modernization and Effective Third Parties Rights in State Aid Proceedings' [2014] European State Aid Law Quarterly 426; Hanns Peter Nehl, '2013 Reform of EU State Aid Procedures: How to Exacerbate the Imbalance between Efficiency and Individual Protection' (2014) 13 European State Aid Law Quarterly 235.

[5] E.g. Merola and Debieuvre (n 2) 415–420.

[6] One of the exceptions is the analysis of the statistics of the General Court's case-law in competition law, including state aid in: Massimo Merola and Jacques Derenne (eds), *The Role of the Court of Justice of the European Union in Competition Law Cases* (Bruylant 2012).

In the absence of relevant literature in the field of State aid law, the literature on the economic analysis of law, to which the notions of accuracy and error belong, constitutes a point of reference. Indeed, the mainstream discussion on error and the accuracy in decision-making (in adjudication) provides for considerations on the relationship between error and the probability of detection of infractions, the related impact on deterrence and optimal sanctions, and the costs of increasing accuracy.[7] However, if this abstract framework is applied to specific fields of law, those mainly are tort law, criminal law[8] and patent law.[9] Quite general also is the literature on error correction, discussing costs and desirability of creation of appellate bodies and their ability to correct errors.[10]

To some extent, the discussion about accuracy in decision-making has arisen in antitrust. It involves studies on the impact of errors on deterrence, preference between Per Se and effect-based/Rule of Reason legal standards, optimal sanctions, information problems and preference between false acquittals and false convictions.[11] With regards to appeals procedures, it has been analysed how the costs of errors are affected under Per Se and effect-based legal standards.[12] Nevertheless, analysis in antitrust may not automatically be transposed to the field of State aid for a range of reasons. First, the rules are not addressed to an infinite number of private actors but to 27 repeatedly acting national authorities, and even more than that, since national

[7] E.g. A. Mitchell Polinsky and Steven Shavell (eds), *Handbook of Law and Economics* (Elsevier 2007) 405–450; Louis Kaplow, 'The Value of Accuracy in Adjudication – an Economic Analysis' (1994) 23 The Journal of Legal Studies 307; Dominique Demougin and Claude Fluet, 'Deterrence Versus Judicial Error: A Comparative View of Standards of Proof' (2005) 161 Journal of Institutional and Theoretical Economics 193; Steven Shavell, *Foundations of Economic Analysis of Law* (Belknap Press of Harvard University Press 2004) 450–457; Devlin and Jacobs (n 1).

[8] Warren F Schwartz, 'Legal Error', *Encyclopedia of Law and Economics*, vols 1. The History and Methodology of Law and Economics (2000); Nuno Garoupa, 'The Theory of Optimal Law Enforcement' (1997) 11 Journal of Economic Surveys 267.

[9] Stephen Yelderman, 'The Value of Accuracy in the Patent System' University of Chicago Law Review; Jay P Kesan, 'Carrots and Sticks to Create a Better Patent System' (2002) 17 Berkeley Technology Law Journal 767–768; Doug Lichtman and Mark A Lemley, 'Rethinking Patent Law's Presumption of Validity' (2007) 60 Stanford Law Review 45, 47–48.

[10] Steven Shavell, 'The Appeals Process as a Means of Error Correction' (1995) 24 The Journal of Legal Studies 379; Niv Moshe Bar and Zvi Safra, 'On the Desirability of Appellate Courts' (2006) 2 Review of Law and Economics 381; Shavell (n 7); Frank H Easterbrook, 'Limits of Antitrust' (1984) 63 Texas Law Review 1; Rebecca Haw Allensworth, 'The Commensurability Myth in Antitrust' (2016) 69 Vanderbilt Law Review 1.

[11] Maarten Pieter Schinkel and Jan Tuinstra, 'Imperfect Competition Law Enforcement' (2006) 24 International Journal of Industrial Organization 1267; Yannis Katsoulacos and David Ulph, 'Legal Uncertainty, Competition Law Enforcement Procedures and Optimal Penalties' (2016) 41 European Journal of Law and Economics 255; Yannis Katsoulacos and David Ulph, 'Decision Errors, Legal Uncertainty and Welfare: A General Treatment' [2014] School of Economics & Finance Discussion Paper, no. 1408 1; C Frederick Beckner III and Steven C Salop, 'Decision Theory and Antitrust Rules' (1991) 67 Antitrust Law Journal 41; Easterbrook (n 10); Arndt Christiansen and Wolfgang Kerber, 'Competition Policy with Optimally Differentiated Rules Instead of "Per Se Rules vs Rule of Reason"' (2006) 2 Journal of Competition Law & Economics 215.

[12] Yannis Katsoulacos and David Ulph, 'Optimal Enforcement Structures for Competition Policy: Implications of Judicial Reviews and of Internal Error Correction Mechanisms' (2011) 7 European Competition Journal 71.

authorities comprise many levels and types of actors assessing measures and taking decisions. Second, the control has an *ex ante* character and does not envisage sanctions, Third, consumer welfare is not the central point of the analysis, and so on. Consequently, although error analysis in antitrust may constitute a certain guidance in terms of the way to approach the subject, it does not contain any answers one may confidently use in the area of State aid, simply because it does not account for fundamental differences between State aid and the rest of competition law.

The area, in which the relevant literature is certainly the richest, is the action for annulment against Commission's decisions. However, when observing the highly disappointing standard for *locus standi* of third parties, once again, the authors' primary focus is on private parties and on their right to effective judicial protection.[13] This criticism is thus made without investigating why and what kind of better access to justice would be beneficial in terms of effectiveness of State aid enforcement, and such a different perspective may yield different results.[14] In addition, this thesis will be one of the first endeavours to analyse the changes brought by several Court's judgments adopted in 2018, which passed almost unnoticed in the literature,[15] while they make the existing assessment of the action for annulment outdated. In the field of competition law in general, the role of judicial review as a means of error correction has been acknowledged,[16] taking into account problems generalist judges face when assessing competition matters[17] and the standard of review.[18] The importance and peculiarities of legal review in competition law

[13] José Luis Buendía Sierra, 'The Role of Competitors in State Aid Procedures' (2015) 14 European State Aid Law Quarterly; Hancher, Ottervanger and Slot (n 2) 1–027, 1–028; Paul Craig, *EU Administrative Law. Second Edition* (Oxford University Press 2012) 306, 330, 332; Michaël Karpenschif, *Droit Européen Des Aides d'État* (Bruylant 2015) 246; Valérie Fauré, 'L'apport Du Tribunal de Première Instance Des Communautés Européennes Au Droit Communautaire de La Concurrence' (Nouvelle Bibliothèque de Thèses 2005) 196; Georges Vandersanden, 'Pour Un Élargissement Du Droit Des Particuliers d'agir En Annulation Contre Des Actes Autres Que Les Décisions Qui Leur Sont Adressées' [1995] Cahiers de droit européen 535.

[14] For instance, as it will be discussed below, an increased access to justice would be beneficial from the point of view of fundamental rights of private actors, but if the Court may not guarantee a high-quality, accurate assessment, it might be better that it does not assess the actions and rejects them as inadmissible.

[15] An exception is: Maria Segura Catalán, Marianne Clayton and Anna Nowak-Salles, 'Third Party Rights and the State Aid Procedures Revisited by the European Courts: An Ever-Sounder State Aid Control' (2019) 10 Journal of European Competition Law & Practice.

[16] Damien Geradin and Nicolas Petit, 'Judicial Review in European Union Competition Law: A Quantitative and Qualitative Assessment.' (2011) 5–6; Merola and Debieuvre (n 2) 383, 388; also in administrative law: Craig (n 13) 295–296.

[17] Michael R Baye and Joshua D Wright, 'Is Antitrust Too Complicated for Generalist Judges? The Impact of Economic Complexity & Judicial Training on Appeals' (2010) 09–07 George Mason University Law and Economics Research Paper Series; Easterbrook (n 10), even though that analysis refers to the U.S. system, with courts acting in the first instance.

[18] Jenny Frédéric, 'Improving Judicial Control of Administrative Decisions in Competition Enforcement', *The role of the Court of Justice of the European Union in competition law cases* (Bruylant 2012); Massimo Merola, 'Substantive Standard of Judicial Control in State Aid Matters', *The role of the Court of Justice of the European*

have also, to some extent, been discussed[19] just like the judicial control in general, in the administrative law literature.[20] Although these analyses are interesting for the present project, they must be adjusted to the State aid framework and developed from the perspective of judicial review as an error correction mechanism, while this function of legality control seems to be taken for granted and not profoundly analysed.

Two conclusions may be drawn from the existing literature. First, the idea of using error and error analysis as a way of evaluating State aid law has never appeared. Instead, the perspective used is mainly that of rights of third parties or a critique of selected aspects of state aid procedure which is not carried out in a broader structured context. As a result, using accuracy as a standalone value, the respect of which is assessed through analysis of State aid law, is highly original, and its contribution will be discussed further on in the introduction. Second, some issues related to the probability, cost and correction of error were partially discussed in the literature on State aid law, competition law, administrative law and economic analysis of law. However, these studies are extremely fragmented and spread over different areas, as well as they do not allow to make conclusions on accuracy in State aid law, thus adopting the function of simple hints and references, at times useful for the present research.

Outside the academic literature, also the European Commission seems to be rather optimistic in not discussing potential accuracy concerns in the course of its State aid reforms. While it recognises the complexity of rules and procedures, which apply "equally to smaller and bigger cases," which constitute a challenge of State aid law,[21] and where the "Commission's investigative powers to collect market information are rather limited,"[22] it implicitly assumes that changes to substantive law will effectively guarantee achievement of better quality of control, promotion of good aid and more efficient capturing of bad aid.[23] Some notions became almost mantra in State aid dictionary, such as a refined economic approach and more effective

Union in competition law cases (Bruylant 2012); Mel Marquis and Roberto Cisotta (eds), *Litigation and Arbitration in Eu Competition Law* (Edward Elgar 2015); also in administrative law: Craig (n 13) 400–445.

[19] Merola and Derenne (n 6).

[20] Carol Harlow and Richard Rawlings, *Law and Administration* (Cambridge University Press 2009); Craig (n 13).

[21] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU State Aid Modernisation, COM/2012/0209 final (SAM), paras 6, 22.

[22] Hans W Friederiszick, Lars-Hendrik Roller and Vincent Verouden, 'European State Aid Control: An Economic Framework', *Handbook of Antitrust Economics* (MIT Press 2007) 645.

[23] ibid., SAM, paras 8, 12, 18, 19.

procedures in the service of less and better targeted aid in line with Lisbon strategy,[24] so that nobody reflects on putting them in practice anymore.

Although the Commission's arguments and ambitions are sensible and certainly are a fruit of thorough discussions, consultations and expert opinions, one aspect is left aside: how will the Commission make them work? Indeed, any change in law or procedure necessarily entails several practical aspects, such as accuracy in implementation of the legal framework. However, first, the Commission has not examined, in a manner accessible to the public, how to guarantee that new rules will be applied accurately, so that the outcomes are efficient in practice and not only on paper. Indeed, there is no evidence that the Commission adapts its assessment and procedures in parallel to transforming and refining the substantive law. More specifically, it puts a lot of emphasis on changes to material law, as it employs more of economic analysis, but these changes are not accompanied by reflection on the challenge of applying sophisticated rules. In other words, the evolution of substantive law is not accompanied by evolution of procedural framework. Second, even if the Commission implicitly assumed that it could handle any different sets of rules with the same, and always satisfactory, accuracy, it seems legitimate to verify the correctness of that assumption. At the end, the question is a basic one: is State aid enforcement effective in light of the level of accuracy with which the abstract rules are applied to individual cases? Could it be more effective than that? Because neither the Commission nor the literature refer themselves to this issue, this thesis will endeavour to elaborate on the matter.

Relationship between error and effectiveness and narrowing down the analysis

It results from the literature review that State aid law has not been analysed from the point of view of accuracy in its enforcement, i.e. the expected cost of error. Before specifying the contribution that this angle of analysis brings to the literature, this section will clarify how the presence of error impacts the effectiveness of any law enforcement, and consequently why this issue should not be disregarded. It will also indicate which methodological choices had to be made in order to cover this large topic in a feasible and reasonable manner.

As a preliminary remark, it shall be indicated that the concept of error followed in this thesis is outcome-based: it is understood as the failure to achieve the desired outcome, which is the correct application of law. In my thesis, I will follow the literature on the economic analysis of

[24] State aid action plan - Less and better targeted state aid : a roadmap for state aid reform 2005-2009, SEC(2005) 795 (SAAP), paras 18, 21.

public enforcement of law in calling this misapplication 'an error' as well as in the distinction it makes between 'false acquittals' and 'false convictions'.[25] Hence, this notion is directly related to the topic of accuracy in adjudication, the latter understood as the absence of error.[26]

One assumption is fundamental for this thesis and needs to be made. Indeed, as it will be discussed in detail in Chapter 2, error may be caused either by improperly designed substantive rules, or by their ineffective application. In this thesis, I will not evaluate State aid substantive law as such. Indeed, the assumption will be that Article 107 TFEU, soft law and the GBER are well designed in the sense that, if accurately applied, they allow to effectively distinguish between desirable and undesirable measures. This assumption relies on the observation that in the SAM, SAAP and public statements, the Commission puts a lot of emphasis on the fact that the criteria it perfects over time do in fact allow to increase the quality of State aid control by separating good from bad aid: this is the overarching objective of all State aid reforms. It is also clear that it involves in its works economists and widely consults its projects to ensure the targeted result, although it would be unfair to claim that economic aspects of the substantive law are free from criticism.[27][28] On the contrary, the Commission does not reflect on the quality of the subsequent application of law. For this reason, my interest goes to enforcement, understood as the ability to accurately apply rules in order to give effect to the well-designed substantive law. Accuracy is opposed to misapplication of law, which prevents desirable effects of law from materializing.

Enforcement is desirable as long as its costs do not exceed the gains obtained from it. To put it differently, enforcement must ensure that the law is enforced, in the worst case, to the point where marginal benefits of enforcement equal the marginal costs: starting from this point, enforcement becomes socially undesirable. This proportion of benefits to costs depends on several elements, for instance on how costly the resources required to enforce law are, or on accuracy of decisions by which the enforcer applies the law.

[25] Polinsky and Shavell (n 7) 427–429.
[26] Shavell (n 7) 450.
[27] Christian Ahlborn and Daniel Piccinin, 'The Application of the Principles of Restructuring Aid to Banks during the Financial Crisis' (2010) 2010 European State Aid Law Quarterly; Christian Ahlborn and Claudia Berg, 'Can State Aid Control Learn from Antitrust? The Need for a Greater Role for Competition Analysis under the State Aid Rules', *The Law of State Aid in the European Union* (Oxford University Press 2004).
[28] For instance, arguing for a more effects-based analysis: Ahlborn and Piccinin (n 27); Ahlborn and Berg (n 27). Their conclusions seem to be all the same pertinent today.

The assumption must be that a correct State aid decision brings more gains than costs – this is the fundamental reason for creating State aid control, which will not be questioned in this thesis. The gain results from a correct application to an individual case of the substantive rule: the gain corresponds to receiving benefits of a desirable aid or avoiding costs of an undesirable one. In such a case, the cost incurred is the enforcement cost, which is the cost of taking the decision, including costs related to the investigation, adopting the decision, its subsequent application and others. On the contrary, in the case of an erroneous application of the substantive rule, the gain may not be obtained (because misapplication does not bring benefits) and therefore, the enforcement cost is increased by the gains missed. Therefore, an incorrect decision brings more costs than gains.[29]

One could investigate further the issue of enforcement costs. More specifically, enforcing law is costly, with the effect that obtaining a correct result may in some cases require so many resources that the gain from the correct outcome is not worth it. However, this problem pertains less to State aid law than to other areas, for instance antitrust, because enforcement costs are borne in any case. Indeed, the Commission may not avoid enforcing law, because it must always carry out assessment of the notified measure, and the question is only that of the procedural stage, at which it will take its decision: this issue will be explored in detail in Chapter 3 on costs. In addition, with the adoption of the 2015 GBER, whose intention is to keep with the Commission assessment only of the most distortive measures (mainly measured by their amount), it may be reasonably assumed that gains from a correct assessment will be relatively high, so that higher enforcement costs may be borne. Finally, the reason for which enforcement costs will not be given particular attention in this thesis is that the latter recommends ways to increase accuracy that in fact would bring reduction in enforcement costs. Indeed, Chapter 2 proposes to simplify assessment criteria in Phase 1 so that their accurate application becomes cheaper, while Chapter 4 identifies as an effective tool of error correction the action for annulment based on procedural issues, which entails a very limited assessment by the Court as compared to the comprehensive action on the merits.

Hence, in order to assess effectiveness of the State aid enforcement system, gains from all decisions must exceed all incurred costs. Since correct decisions result in gains while erroneous ones in costs, the more frequent and costly the incorrect State aid decisions are, the lower the overall gains. At some percentage of erroneous decisions, enforcement will cost more than it allows to gain so that it will become socially undesirable. In a case where the system of

[29] For simplicity, I leave aside here several questions, such as the costs of increasing accuracy and potential gains from erroneous decisions, but I will come back to these points later in my thesis.

enforcement fails, even the best substantive law may fail to achieve its objectives, for instance ensuring efficient functioning of markets or obtaining increase in welfare.[30] This is why it is important to take potential errors into account when designing or analysing a legal system.

Naturally, measuring (calculating) the threshold at which errors render enforcement ineffective is beyond one's capacities. In the same vein, the objective of this research project is not to identify the exact number of erroneous decisions – it is objectively impossible to analyse all of them and to make a judgment about their correctness. Consequently, this thesis will not make a definitive but arbitrary claim on whether State aid enforcement is effective or not. However, it remains uncontroversial that error may, if it reaches certain rate, threaten the effectiveness of enforcement and achievement of the law's objectives. Furthermore, if one assumes that substantive law is well designed and its correct application is thus desirable, one should always aim to decrease the expected cost of error, because it will always provide higher benefits.

Finally, it shall be specified how "State aid enforcement by the Commission" will be understood for the purpose of this thesis. The analysis extends only to the "core" State aid proceeding – assessment of notified state measures by the Commission. Issues concerning infringement of the standstill obligation, recovery of aid, interim measures, conditions joint to positive decisions, simplified procedure and implementation of Commission's decisions will be excluded from the scope of analysis. This choice is dictated by the fact that these issues are somehow accessory to "basic" errors in decisions on notified aid measures as well as by their complexity, which would merit a separate analysis. In addition, control of notified aid, leading to simple acceptances, constitutes over 85% of State aid control, so that the scope of analysis covers a significant part of State aid enforcement.

Contribution

The fact that State aid error has not been analysed in the literature does not imply that this approach would be of no value. Rather, and since probably anyone would intuitively agree that enforcement should be accurate, accuracy simply seems to be taken for granted. Moreover, it

[30] Naturally, a law may bring benefits even if its enforcement fails, e.g. because it introduces some kind of order in the society or prevents commitment of wrongful acts, even if the latter are not detected with a high probability (they would still have impact on risk-averse actors). In economic laws, the detrimental result is more straightforward, because the function of these laws is to achieve a concrete, often measurable, result on the market through intervention or its absence.

has been observed that "*error analysis may be the single most important unresolved issue facing modern competition policy."*[31] In this context, the contribution of this thesis lies in the fact that the angle of analysis it adopts gives new interesting insights and lessons about the quality and possible improvements of EU State aid law.

According to the relationship between error and effectiveness explained above, if the substantive law is good (and it seems that the Commission puts all its effort into that outcome, so that it may be assumed for the purpose of this thesis), correct enforcement is always desirable because it brings concrete gains. These gains are related to the reason for which EU State aid law was created, and will be analysed in detail in Chapter 3. Those are, amongst other, creation of "a level playing field", avoiding "preventing or delaying the market forces from rewarding the most competitive firms, thereby decreasing overall European competitiveness" and preventing "building-up of market power in the hands of some firms," which eventually harm consumers through "higher prices, lower quality goods and less innovation."[32] On the other hand, errors are costly and reduce efficiency of State aid control[33] and welfare,[34] by compromising achievement of Union's objectives. Hence, alignment with EU goals and strategies shall naturally be related to devotion to ensuring effective enforcement. As this thesis offers policy recommendations and guidance on how to lower down the expected cost of error, it constitutes an added-value in striving to make State aid enforcement more effective. With lower expected cost of error, benefits from EU State aid law would be greater and Union's objectives more successfully accomplished.

Furthermore, accuracy in itself is a very important value for an institution such as the European Commission, given that the latter consistently faces allegations against its democratic legitimacy.[35] Indeed, and in particular in the field of competition law, the Commission's powers remain largely unchecked so that their exercise has been moved away from the democratic accountability.[36] In this context, justifications for Commission's actions and independence are based on the output legitimacy paradigm, which is built on the effectiveness in resolving

[31] Devlin and Jacobs (n 1) 76.
[32] SAAM, para 7
[33] Richard A Posner, 'An Economic Approach to Legal Procedure and Judicial Administration' (1963) 2 The Journal of Legal Studies 399, 401.
[34] Yannis Katsoulacos and David Ulph, 'Regulatory Decision Errors, Legal Uncertainty and Welfare: A General Treatment' (2017) 53 International Journal of Industrial Organization 326.
[35] Jerzy Jaskiernia, *Wpływ Standardów Międzynarodowych Na Rozwój Demokracji i Praw Człowieka, Tom 2* (Wydawnictwo Sejmowe 2013) 61.
[36] Kelyn QC Bacon, *European Union Law of State Aid. Third Edition* (Oxford University Press 2017) 49.

citizens' problems and achieving their goals.[37] Indeed, output legitimacy expresses the theory of a government "for the people" and "with the people," as opposed to the government "of" and "through" the people" (input legitimacy),[38] and it may be acknowledged as long as a system or an institution benefits the society.[39] Therefore, accuracy translated into effectiveness of the projects undertaken by the Commission constitutes a legitimising factor, which is necessary to justify the Commission's powers. Understanding error and lowering it down would make Commission's actions in the area of State aid more efficient and thus, more legitimate.

Moreover, error used as a methodology to assess State aid law allows to identify issues, which could not be observed using the mainstream methodology. For instance, it is only when investigating the optimal complexity of the assessment rule at different procedural stages that it seems that assessment in the preliminary examination is not optimal and that there is need for clarity as to the scope of this assessment. Moreover, while literature traditionally points at unsatisfactory accessibility standard for competitors within the framework of the action for annulment, this thesis concludes that the framework is evolving in favour of competitors, but the main problem remains the competitors' awareness, willingness and ability to spot and notify decisional errors. Even beyond suggestions this thesis makes to lower down the expected cost of error, the discovered shortcomings, limits and specificities of State aid control may be taken into account by the Commission when assessing existing law or new reform proposals. From this perspective, the contribution of this thesis consists in deepening the understanding of State aid law and uncovering challenges, which it is in the common interest to address or at least further discuss.

Finally, the analysis based on error does not repeat, nor does it contradict, findings of other authors, who adopted different perspectives. Error is a different point of view, from which State aid enforcement may be seen in a different light. Hence, it enriches and complements previous analyses in the conviction that an effective and efficient State aid control in the EU must be a trade-off between various opposing values and perspectives: accuracy in enforcement shall be appreciated together with protection of individual rights, policy goals, rules effectively

[37] Joris Larik, 'From Speciality to a Constitutional Sense of Purpose: On the Changing Role of the Objectives of the European Union' (2014) 63 International & Comparative Law Quarterly 27.
[38] Claudia Wiesner, 'Democratic Legitimacy, Democratisation and Democratic Identity of the European Union - Old Questions, New Challenges' (2008) 12 Redescriptions. Yearbook of Political Thought, Conceptual History and Feminist Theory of the European Union - Old Questions, New Challenges 97; Vivien A Schmidt (ed), *La Démocratie En Europe. L'Union Européenne et Les Politiques Nationales* (La Découverte 2010) 15.
[39] Peter Clelland, 'How Best Can The European Union Bridge Its Democratic Deficit?' (2008) 11.

distinguishing between good and bad practices, political feasibility and so on. In addition, the analysis falls within the framework of the process of "economization" of State aid law, within the framework of which law is understood as a variable which can be manipulated in order to achieve a better economic outcome.[40] This better economic outcome clearly is the fundament of State aid reforms undertaken under SAAP and SAM, and therefore this thesis constitutes one of the assessment of these reforms in order to help to secure the aspired better outcomes.

Chapter synopsis

In order to answer the research question, "What are the components of the expected cost of error in State aid assessment and how to decrease this expected cost?," this thesis will be composed of five chapters. First four of them will cover enforcement by the Commission and identify different aspects of the expected cost of error and possibilities to lower it. The last chapter will build on the previous parts but will relate them to decentralisation of State aid enforcement operated by the GBER, whereby national authorities themselves enforce EU State aid law.

Chapter 1 will set the stage for uncovering the expected cost of error by pointing at several characteristics of State aid law and procedure which matter for an error analysis. Indeed, this chapter will outline basic substantive provision, in order to identify types of errors which may occur in State aid enforcement by the Commission. From the substantive law, the analysis moves on to a description of the procedural framework and is further completed by a practical insight into evidence requirements imposed by the Commission on Member States. At a later stage, both elements will be related to errors, in particular in search for the optimal assessment rule. Completing the procedural framework, the essential characteristic of State aid law will be singled out: the prevailing position of the notifying Member State in the procedure. The risks related to such set-up, together with the rest of observations made in Chapter 1, will inform further analysis of the expected cost of error as well as of practical ways of reducing it.

On that basis, Chapter 2 will analyse the first component of the expected cost of error, namely the probability that a decisional error occurs. More precisely, it will analyse the substantive and procedural law from the point of view of opportunities to accurately apply law and obstacles to effective enforcement. In the first place, within the framework of positive analysis, it will

[40] Sabine Frerichs, 'Studying Law, Economy, and Society: A Short History of Socio-Legal Thinking' (Helsinki Legal Studies Research Paper No 19 2012) 51–52.

identify the main risk of error, which emerges in State aid control, namely that of Type 1 errors in the preliminary examination. Subsequently, it will endeavour to adopt a more normative approach. Indeed, by looking into the design of procedural law together with the assessment criteria applied to carry out State aid evaluation, it will reflect on what kind of an assessment rule would be best suited for State aid control so that it guarantees the most accurate outcome. It will refer to the notion of optimal complexity of the rule in the context of trade-off between rules accurately distinguishing bad from good aid on the one hand, and rules realistically possible to enforce at each procedural stage on the other. It will conclude on the necessary distinction between the assessment rule in the first and in the second procedural phase, and in the absence of satisfactory practice of the Commission, it will make recommendation on how to lower the probability of error by adopting the optimal assessment rule. This chapter, but the analysis and recommendations it offers, will constitute one of the most valuable chapters of this thesis.

Insights into the probability of error will be followed by examining the second component of the equation, the cost of error, in Chapter 3. This chapter will also endeavour to make both positive and normative claims. It will start by decoding the costs that errors may cause. It will identify three main types of costs, namely distortion of the market situation, impact on Member States' incentives, and procedural costs. Subsequently, and in order to minimise the costs, it will try to establish a preference for one type of error, by indicating which of them is less costly and shall therefore be preferred over the other. Looking for such preference is widespread in the literature, e.g. in antitrust, where preference for false acquittals traditionally dominates. Nevertheless, a similar analysis in State aid brings a number of difficulties, namely due to disproportion between Phase 1 and Phase 2 decisions and the possibility that the cost of error changes as the number of errors grows. Consequently, in the current set-up it is impossible to indicate which error would be less costly. This necessary part of analysis strengthens the importance of lowering the probability of error and/or of reducing its costs *ex post*, ie through an error correction mechanism.

Chapter 4 will explore ways to address both the probability and the cost of error through error correction tools. Having identified several instruments of elimination of error, it will focus on the action for annulment as the most comprehensive and potentially best suited mechanism. Within the framework of the action for annulment, it will further distinguish between its two types: the action against the merits of a decision and the action based on protection of procedural

rights of the applicant. Considering their potential as well as the recent case-law of the Court of Justice, this chapter will identify the latter action as the most promising to address decisional errors. It will therefore assess its effectiveness and identify issues, which remain to be addressed. In particular, it will attract attention to the fact that although the legal framework seems to have been evolving in favour of third parties, the emerging problem is that of State aid awareness and proactive behaviour of competitors, which blocks an effective use of Article 263 as an error correction mechanism.

Finally, in order to address decentralisation of enforcement through the General Block Exemption Regulation, Chapter 5 will ask the question of how enforcement by national authorities sits with the expected cost of error in State aid decision-making. It will follow the same scheme of analysis as in enforcement by the Commission, i.e. the probability of error, its cost and error correction mechanisms. This chapter will apply this analytical framework to the specificity of the enforcement of the GBER, expressed both in its limited scope and in the responsibility put on national authorities as law enforcers. The analysis will confirm the need for long-term, consistent efforts put into education of all involved actors in order to lower down the expected cost of error. It will identify concerns common to both types of enforcement, in particular the importance of competitors' awareness and their active participation in State aid enforcement. It will observe that accuracy in State aid control by the Commission and in that carried out at the national level require different approaches and recommendations, and that unlike in the former enforcement, the Commission is very conscious about the value of accuracy when it is not the Commission itself enforcing.

Chapter I – Characteristics of the State aid procedure relevant for an error analysis

1. Introduction

The aim of this chapter is to prepare the ground for the core analysis, which will be developed in the subsequent chapters of this thesis. Its aim is, first, to introduce in Section 2 the notion of error, which shall inform the reading of the entirety of this thesis, and to operate a distinction between Type 1 and Type 2 errors in light of substantive law of State aid. Second, its aim is to attract attention to three procedural aspects of State aid law: differences between the preliminary examination and the formal investigation procedure and their comparison with other fields of EU competition law (Section 3), evidentiary standards determining the quality of information that constitutes the basis for decision-making (Section 4), and the dominant role of the notifying Member State in State aid procedure, in light of informational asymmetries the Commission needs to overcome to gather necessary information (Section 5).

The following chapters of this thesis will build on the weaknesses identified in this chapter, analysing their impact in particular on the probability of error, and reflecting on recommendations that could be made in order to lower the expected cost of error down.

2. EU State aid law and the types of assessment errors

The aim of this section is to identify the types of error that may occur in the enforcement by the Commission of EU state aid law. To this end, the main Treaty provisions will first be described since they constitute the substantive law whose erroneous assessment is the object of this thesis. Next, a distinction will be made between two basic types of errors. This classification will constitute the basis for the considerations in the following sections and chapters. Finally, a more detailed distinction between errors within Type 1 and Type 2 will be operated, not only for the completeness of the description but also because it will be of some relevance in the subsequent analysis.

2.1. A brief overview of State aid law of the EU

Measures granted by Member States are subject to provisions of Articles 107 to 109 TFEU. Article 107 contains substantive rules on state aid while Article 108 concerns the procedure. This section will be focused on Article 107, in order to identify the errors the Commission may make when assessing state measures.

2.1.1. Article 107(1) TFEU

Article 107 TFEU gives basis for a two-fold appraisal by the Commission. Firstly, it sets out the criteria that a measure must cumulatively meet in order for it to be considered as state aid. These criteria are: (1) intervention by the State or through State resources, (2) an advantage obtained by the recipient of aid, (3) a selective basis on which the advantage is given, (4) distortion or a threat of distortion of competition, and (5) affectation of trade between Member States**.** Once all these conditions are fulfilled, the Commission may proceed to further analysis. In the opposite case, the measure may not be considered as aid and therefore, it is not fall under to the state aid rules. The concept of aid is objective and if a measure meets the criteria, the Commission has no discretion in deciding that it is or is not aid. Nevertheless, the application of the definition of State aid may involve very complex economic assessments, for instance within the framework of the Market Economy Operator principle, which determines the advantageous character of the measure.[1]

Secondly, Article 107(1) lays down the general incompatibility rule: when the measure is qualified as aid, without any further assessment it would be considered to be incompatible with the internal market. As a result, it may not be granted by the Member State and if it has already been granted, it must be recovered from the beneficiary.

2.1.2. Article 107(2) and (3) TFEU

Regardless of the general incompatibility rule, it is possible that a measure that constitutes aid is compatible with the internal market. Exemptions are foreseen in paragraphs 2 and 3 of Article 107 and cover aid having a social character, aid granted in response to a natural disaster or exceptional occurrences, aid granted to remedy the effects of the division of Germany, aid to promote the economic development of disadvantaged areas, aid to promote the execution of an important project of common European interest, aid to facilitate the development of certain economic activities or of certain economic areas, and aid for culture and heritage conservation.

The difference between the two paragraphs lies in the fact that measures falling within the scope of Article 107(2) *must* be approved by the Commission while those falling within the scope of Article 107(3) only *may* be decided to be compatible with the internal market. The Commission has therefore some discretion in approving aid from paragraph 3, which is not the case for

[1] European Commission. State Aid Manual of Procedures. 2013. Internal DG Competition working documents on procedures for the application of Articles 107 and 108 TFEU (Manual of Procedures), p. 1.5.

paragraph 2. However, even in this latter case, the Commission still has to decide that the conditions for exemption are met.

2.1.3. Deciding on state measures in practice

The Commission does not freely apply the Treaty provisions, which are phrased in a general and unclear manner. As regards the notion of aid, the criteria have been subject to interpretation by the Court of Justice of the EU. Some of the elements of state aid, such as selectivity or advantage, have significantly evolved throughout the years and numerous standards have been adopted to decide on the characteristics of the measure (e.g. Private Market Investor Principle), so that in practice, the reach of Article 107(1) changed since the beginning of State aid law.[2] Naturally, the Commission's assessment must be in line with the case-law of the Court interpreting the notion of aid. In a 2016 document, the Commission clarified the notion of state aid, as understood and interpreted by the Commission and the EU Courts.[3]

In the compatibility assessment, the Commission exercises its discretion by balancing "the necessity and the proportionality of the aid measure in achieving a Community objective versus the distortion of competition brought about by it."[4] It disposes of a whole range of acts of soft law, which contain detailed criteria for assessment of compatibility of specific categories of measures. These documents refer to specific types of aid: e.g. Guidelines on State aid for rescuing and restructuring,[5] Guidelines on regional State aid,[6] Framework for State aid for research and development and innovation[7] and over 20 other acts. Therefore, the Commission applies to a notified measure the appropriate act of soft law and on this basis makes a judgment on the application or not of Article 107(2) or (3). Measures approved directly under Treaty provisions are very rare.[8] This practical dimension of application of EU state aid law, namely reliance on various acts of soft law, will be essential in the following sections of this chapter,

[2] The evolution of the concept of State aid was presented and analysed in: Juan Jorge Piernas López, *The Concept of State Aid under EU Law : From Internal Market to Competition and Beyond* (Oxford University Press 2015).
[3] Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union (2016/C 262/01).
[4] Manual of Procedures, at 1.10.
[5] Communication from the Commission. Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (2014/C 249/01), OJ C 244, 1.10.2004 (RR guidelines).
[6] Guidelines on regional State aid for 2014-2020 (2013/C 209/01), OJ C 209, 23.7.2013 (RAG).
[7] Communication from the Commission. Framework for State aid for research and development and innovation (2014/C 198/01), OJ C 198, 27.6.2014 (RDI framework).
[8] 260 out of 4107 decisions, which is about 6%. Moreover, some of these decisions followed a withdrawal of the notification by the Member State.

as well as in Chapter 4, in which incompetence of the Court to review complex compatibility assessments will be discussed.

2.1.4. Basic distinction between positive and negative decisions

Without getting into the procedural framework of state aid control as well as details of individual acts of soft law, it may already be observed what kind of decisions the Commission may take. First, there are decisions by which the measure is approved: that a measure does not constitute aid (assessment based on Article 107(1)), or a decision that the measure constitutes aid but it is compatible with the internal market (on the basis of Article 107(2) or (3)). These are positive decisions. Second, there are decisions by which the measure is prohibited: that the measure constitutes aid and is incompatible with the internal market (on the basis of Article 107(1), deciding that exemptions (2) or (3) do not apply). These are negative decisions.

2.2. Typology of errors – Type 1 and Type 2 errors

Generally, in the context of decisional errors the literature makes a distinction between false convictions and false acquittals. This terminology was originally used in the field of criminal law,[9] but it is now employed also in other fields, like antitrust.[10] Often, false convictions are called 'Type 1 errors' or 'false positives,' while false acquittals 'Type 2 errors' or 'false negatives.' Hence, a Type 1 error is understood as disapproving benign actions, while a Type 2 error is understood as approving harmful actions.[11] In antitrust, a Type 1 error means condemning a firm's competitive behaviour while Type 2 error acquitting a firm that acted anticompetitively.[12]

Considering the short description of substantive State aid law enshrined in the Treaty, it is apparent that this basic distinction between types of errors may be transposed to state aid law. In order to operate it, it is sufficient to adhere to the basic distinction between positive and negative decisions. As it will be explained in the following section, the distinction between different types of errors may even be pushed further, depending on the type of assessment and

[9] A Mitchell Polinsky and Steven Shavell (eds), *Handbook of Law and Economics* (Elsevier 2007) 427; Nuno Garoupa, 'The Theory of Optimal Law Enforcement' (1997) 11 Journal of Economic Surveys 267, 283.
[10] David S Evans and A Jorge Padilla, 'Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach' (2005) 72 University of Chicago Law Review 20; Maarten Pieter Schinkel and Jan Tuinstra, 'Imperfect Competition Law Enforcement' (2006) 24 International Journal of Industrial Organization 1267, 1280.
[11] Yannis Katsoulacos and David Ulph, 'Decision Errors, Legal Uncertainty and Welfare: A General Treatment' [2014] School of Economics & Finance Discussion Paper, no. 1408 1, 8.
[12] Schinkel and Tuinstra (n 10) 1280.

the decision in which the error occurred. However, for the simplicity of the analysis, I will follow the distinction between Type 1 and Type 2 errors unless it is necessary to be more precise.

Hence, a Type 1 error (a false conviction) consists in an erroneous negative decision, which disapproves a measure while in reality the measure does not raise concerns from the EU state aid law point of view. It means that it is decided that a measure constitutes an aid incompatible with the internal market and may not be granted (or should be recovered) while in reality, it either does not constitute aid within the meaning of Article 107(1) or it falls within the scope of Article 107(2) or (3) and should thus be considered to be compatible with the internal market. A Type 2 error (a false acquittal) consists in an erroneous positive decision, which mistakenly approves a measure. More specifically, it is decided that a measure either does not constitute aid or is compatible with the internal market on the basis of Article 107(2) or (3) although in fact, the measure constitutes incompatible aid.

In other words, in erroneous decisions the Commission fails to identify the true character of the measure: erroneous negative decisions disapprove benign measures (Type 1 error) while erroneous positive decisions allow harmful ones (Type 2 error).

2.3. Types of errors in State aid assessment

With two main types of errors identified, it is possible to develop a classification based on the nature of assessment made by the Commission. Such an analysis will result in a further distinction between errors of each type.

2.3.1. Type 1 errors

With regards to Type 1 errors (erroneous negative decisions of the Commission), a difference may be made between: (1) decisions that erroneously consider the measure to constitute aid, and (2) decisions that correctly consider a measure to constitute aid but erroneously consider it to be incompatible with the internal market. A negative decision may or not be accompanied by the recovery order; however, it is not related to the compatibility assessment and thus not relevant for the present analysis.

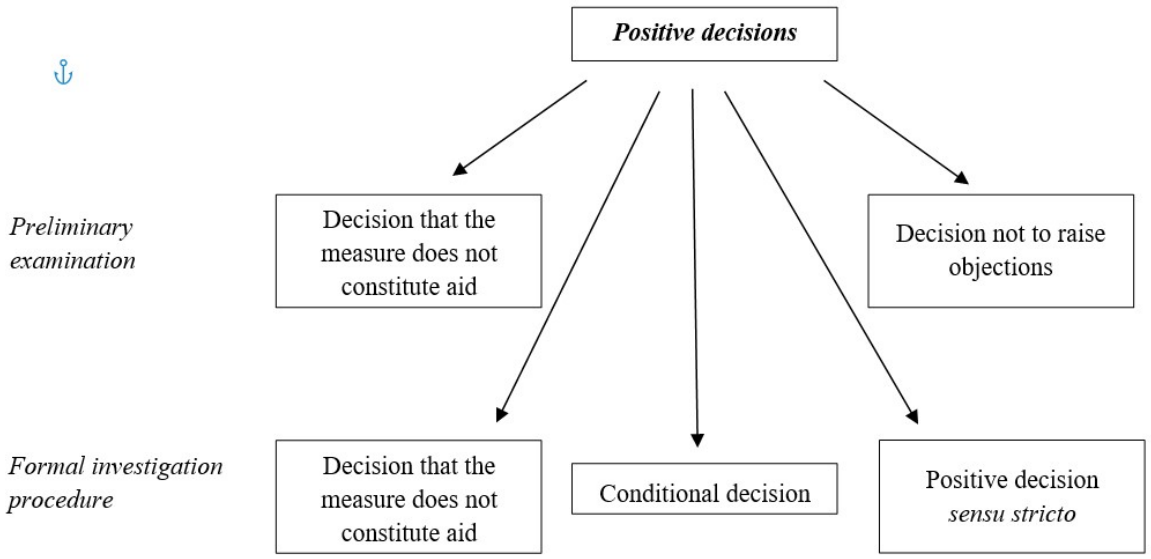
More problems in classification are caused by the error in considering a measure to constitute aid, because this inaccurate intermediary conclusion will lead to an unnecessary compatibility assessment. If the final decision is negative, one clearly is in the presence of a Type 1 error,

understood as erroneous prohibition of a measure which should be granted. In contrast, if the measure is subsequently declared compatible with the internal market, the initial Type 1 error is partially remedied in the sense that the measure can be granted to its beneficiary. Naturally, the resources spent on the compatibility assessment, as well as potential conditions attached to the decision, mean that this error remains costly.

2.3.2. Type 2 errors

Different types of positive decisions, taking into account the procedural stage, are presented in Diagram 1.

Diagram 1.



Indeed, with regard to Type 2 errors (the Commission erroneous positive decisions), it is useful to identify different positive decisions the Commission may take. These decisions are: (1) decision that the measure does not constitute aid, (2) decision that the measure constitutes aid but it is compatible with the internal market, and (3) conditional decision: decision that the measure constitutes aid and it is compatible with the internal market under specific conditions. Moreover, positive decisions may be divided according to the procedural stage at which they were taken. The procedure will be extensively discussed in the following sections; for now it is sufficient to say that the procedure is composed of two stages: the preliminary examination and

the formal investigation procedure.[13] The latter is opened only if the former leaves some doubts as regards the compatibility of the measure.[14] Therefore, positive decisions may be divided into: (1) decisions adopted in the preliminary examination, and (2) decisions adopted after the formal investigation. Indeed, the Commission may decide not to open the formal investigation procedure and take the decision at the preliminary stage, considering that the measure does not constitute aid or that an aid is compatible with the internal market (the latter is called a decision not to raise objections). The same two types of decisions may be adopted after the second phase, except that in such a case, a decision not to raise objection is called simply a positive decision (positive decision *sensu stricto*).
This distinction does not apply to conditional and negative decisions because they may be adopted only after the formal investigation procedure.[15]

Hence, a difference may be made between: (1) decisions that erroneously consider a measure not to constitute aid, and (2) decisions that correctly consider a measure to constitute aid but erroneously consider it to be compatible with the internal market. As mentioned in the introductory part, potential errors in accepting conditions and deciding on their contents are out of scope of this analysis.

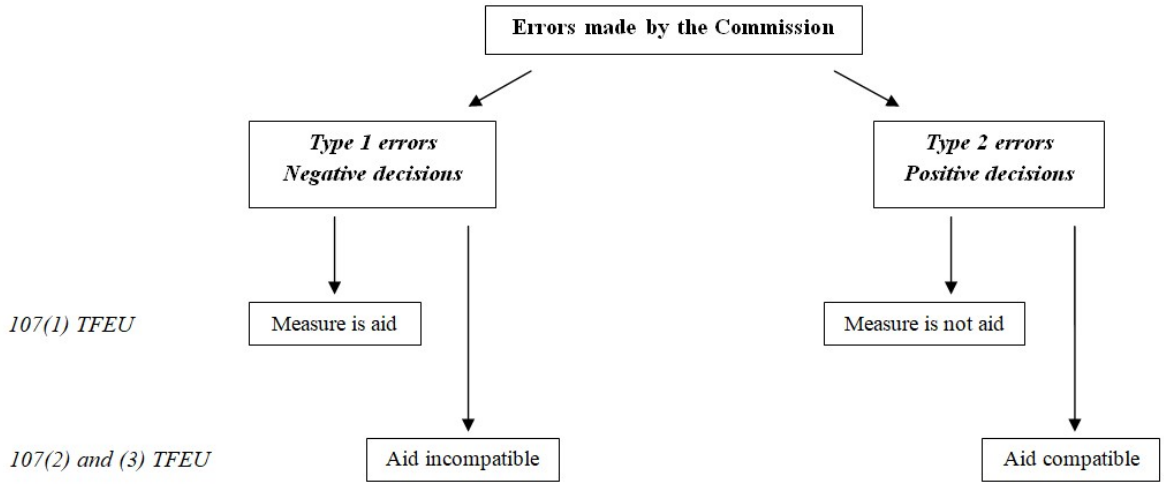
As regards the distinction according to the procedural stage, another type of decision, and therefore of error, may be observed. The error may consist in not opening the formal investigation and adopting the final decision at the preliminary stage. This kind of error has a purely procedural character and may be incorporated into Type 2 errors, although it will become absolutely central for considerations in the following chapter. Similarly, adoption of a decision after a preliminary examination or a formal investigation does not as such change the character of error.

2.4. Conclusion

As a conclusion of the considerations above, Diagram 2 summarises the basic types of errors that may occur in state aid enforcement by the Commission.

[13] Council Regulation 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, OJ L 248, 24.9.2015, p. 9-29 (Procedural Regulation), Art. 4 and 6.
[14] ibid, Art. 4(4).
[15] ibid, Art. 9(5).

Diagram 2.



As mentioned in the section relating to Type 1 errors, the finding that a measure constitutes aid is not a final error, because it only leads to unnecessary compatibility assessment, by which the Commission may either approve or reject the measure. However, it renders the compatibility assessment ungrounded, entails costs and may be avoided by applying the same recommendations as those that concern other errors. Finally, together with the other three errors, it provides the overview of the findings impacted by the lack of accuracy, which gives it the place in the above diagram.

For the same reason of providing an overview of the erroneous outcomes of State aid assessment, the diagram is not complexified by a distinction between the procedural stages. However, errors under each procedural phase will be discussed at a later stage of this thesis.

In the light of substantive provisions of state aid, it has been explained what kinds of erroneous outcomes may be reached by the Commission and perpetuated in its decisions. Naturally, it is unrealistic to suspect that all these errors occur with the same probability or have comparable costs. Therefore, and in particular in order to attempt an analysis of the probability with which errors occur, it will now be necessary to turn into the procedural rules of state aid. The following section will offer the description of these rules, which will constitute the basis for the considerations that follow.

3. Characteristics of the administrative procedure in State aid

The aim of this section is to present the procedural rules relevant in the context of error analysis. First, the succinct provisions of the Treaty related to this issue will be described. Second, detailed rules of procedure will be discussed, while maintaining the distinction between two different stages of procedure. This will be followed by a short comparison of State aid procedural rules with their counterparts in EU antitrust and merger law.

3.1. State aid procedural rules

At the level of the Treaty, State aid procedural rules are more than summarily laid out in Article 108. What results from them is, most importantly, the obligation of the Member States to notify to the Commission all projects of aid. However, the Treaty does not contain enough provisions to carry out the procedure after the aid has been notified. Therefore, such provisions had to be elaborated by the Commission and the EU Courts throughout the years. They have first been codified in a Regulation from 1999,[16] which was then replaced by the 2015 Procedural Regulation; the following analysis will be based on the latter set of provisions.

The Procedural Regulation follows a distinction between two stages of the procedure: the preliminary examination (Phase 1) and the formal investigation procedure (Phase 2).[17] Each of them will be described in order to identify their lacunae and allow for the error analysis, which will be carried out in the upcoming sections.

3.1.1. The preliminary examination

In line with Article 108(3), the State that wishes to grant an aid notifies its project to the Commission. The notification should be complete, which means that it must contain all information necessary to take the decision by the Commission.[18] Once the notification is received, the Commission shall start the administrative procedure: this first phase is known as the preliminary examination.

[16] Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty, OJ L 83, 27.3.1999.
[17] Terms 'Phase 1' and 'Phase 2' are not used in the Procedural Regulation, but will be used in this thesis for simplicity.
[18] Procedural Regulation, Art. 2(2).

The purpose of the preliminary examination is to enable the Commission to "form an initial view as to the partial or total compatibility of the aid in question with the [internal] market."[19] Hence, taking into account its character, this phase was envisaged to last no longer than 2 months.[20] However, this period starts running only after all needed information is obtained: if the State submits an incomplete notification, the Commission sends to it a request for information and waits for the response. Missing information should be identified quickly in order to address to the State (preferably) one comprehensive information request;[21] there is however no obstacle to send multiple requests. Thus, in practice, the procedure may take longer even before the two months start to run. That notwithstanding, if the Commission keeps sending requests, which are not necessary to form the opinion on the measure but concern only its subsidiary aspects, the Court may consider them to constitute an 'artificial extension of the preliminary phase', so that such requests do not count for calculation of the two-month period.[22] If the State fails to respond to the request for information, the notification is deemed to be withdrawn; if it declines to provide the required information, or provides an incomplete one, the Commission shall open the formal investigation procedure.[23]

At this stage of the procedure, the Commission exchanges information only with the notifying State. It may not require information from actors such as the beneficiary of aid, its competitors or other States. Moreover, interested parties may not even voluntarily participate in the preliminary examination by submitting their comments: the lack of procedural rights was confirmed by the Court. The latter considered that interested parties have no right to be associated with the preliminary examination, since the Treaty reserves the right to submit comments only to the "actual investigation" referred to in Article 108(2).[24] Therefore, Phase 1 takes place exclusively between the Commission and the State.

Based on the notification, and potentially after the exchange of information with the State, the case team discusses the case with the Head of Unit or Director. The Commission decides either

[19] C-646/11 P, *3F v Commission* (2013) ECLI:EU:C:2013:36, para 24.
[20] Procedural Regulation, Art. 4(5).
[21] Manual of Procedures, at 5.40.
[22] In case C-99/98, *Austria v Commission* (2001) ECLI:EU:C:2001:94, five requests for information were sent to the State and 18 moths separated the notification from the opening of the formal investigation procedure. However, the third letter was considered by the Court to be unnecessary and therefore not formally extending the two-month period (paras 61-66).
[23] Manual of Procedures, at 5.61.
[24] T-79/14, *Secop v Commission* (2016) ECLI:EU:T:2016:118, para 64.

to end the procedure (by a decision that the measure does not constitute aid or by a decision not to raise objections) or to open a formal investigation procedure.

3.1.2. The formal investigation procedure

The Commission is obliged to open a formal investigation procedure whenever at the end of the preliminary examination "it has serious difficulties or doubts in determining the compatibility of the aid... and/or difficulties of a procedural nature in obtaining the necessary information."[25] The Court of Justice extended this principle to doubts regarding the qualification of the measure as aid.[26] According to the Manual of Procedures, the existence of such difficulties may be indicated by the duration of the preliminary phase, by the number of information requests sent or the number of meetings with the State.

The formal investigation procedure, whose duration shall not exceed 18 months, allows the Commission to be "fully informed of all the facts of the case" whenever it has witnessed serious difficulties in determining compatibility of aid.[27] It ensures "a comprehensive examination of the case by exploring doubtful matters further with the Member State concerned and by hearing the views of interested parties."[28]

The decision to open the procedure, which is published in the Official Journal of the European Union, summarises the relevant issues of fact and law, includes a preliminary assessment of the measure and indicates doubts the Commission has with regards to the measure.[29] Furthermore, it prescribes the period within which the State and the interested parties may submit their comments. The notion of an interested party, which disposes of certain rights in this procedure, is defined as "any Member State and any person, undertaking or association of undertakings whose interests might be affected by the granting of aid, in particular the beneficiary of the aid, competing undertakings and trade associations."[30] Clearly, both beneficiaries and competitors, absent in the preliminary examination, may make known to the Commission their views on the case.

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[25] Manual of Procedures, at 6.4.
[26] T-58/13, *Club Hotel Loutraki AE and Others v European Commission* (2015) ECLI:EU:T:2015:1, para 36.
[27] C-84/82, *Germany v Commission* (1984) ECLI:EU:C:1984:117, para 13, C-290/83, *Commission v France* (1985) ECLI:EU:C:1985:37, para 16, more recently in T-103/14, *Frucona Košice* (2016) ECLI:EU:T:2016:152, para 110.
[28] Manual of Procedures, at 6.2.
[29] Procedural Regulation, Art. 6.
[30] ibid, Art. 1(h).

The period for submitting comments "shall normally not exceed 1 month"[31] – late comments are usually rejected.[32] In order to attract their attention, the decision may be sent to individually identified interested parties (e.g. known aid beneficiaries).[33] All the comments received are communicated to the State, which has one month to respond.

Since the submission of comments is not mandatory, the Commission may address a request for information to any Member State, undertaking or association of undertakings. This possibility arises when information obtained during the preliminary phase is insufficient to carry out a full assessment of the measure. Information requested must be limited to the issues unresolved during the formal investigation procedure so far. Moreover, the State must give its consent to the request for information addressed to the aid beneficiary.[34] Finally, information is submitted to both the Commission and the notifying State – the latter must be given the opportunity to express its view on the information provided before the Commission takes the final decision.

A difference may be observed between requests for information depending on their addressees. In case of Member States, the Commission may send only a simple request: if the Member State does not submit information in the prescribed period, the Commission may only send to it a reminder.[35] The situation is different in case of undertakings and associations of undertakings. Although those actors may be asked for information, similarly to the Member States, by a simple request, supplying incorrect or misleading information is penalised with a fine of up to 1% of their total turnover in the preceding business year.[36] Moreover, the Commission may request information by decision: incorrect or misleading information will be punished by the same 1% fine and additionally, the Commission may impose periodic penalty payments of a maximum of 5% of the average daily turnover in the preceding business year if the undertaking fails to supply complete and correct information.[37]

[31] ibid, Art. 6.
[32] Manual of Procedures, at 6.41.
[33] ibid, at 6.48.
[34] This requirement was interpreted by the EU Ombudsman as related to the general lack of access of beneficiaries to the case file: *Case 1179/2014/LP on the involvement of "interested parties" in State aid investigations carried out by the Commission*.
[35] Procedural Regulation, Art. 7(5).
[36] ibid, Art. 7(6) and 8(1).
[37] ibid, Art. 7(7) and 8(2).

At the end of the formal investigation procedure, the Commission adopts a positive, conditional, negative decision or a decision that the measure does not constitute aid. If information obtained is insufficient to prove the compatibility of aid, the Commission shall take a negative decision.[38]

From this description of the procedural rules, it may be observed that the formal investigation lasts much longer than the preliminary examination, confers on the Commission more investigatory powers and involves third parties. The design of both stages of the procedure seems to confirm the concept of the first phase as a truly preliminary one, allowing for the very first opinion on the measure to be made, and of the second phase as intended to ensure a proper examination of the measure whenever it raises concerns.

3.2. Comparison with the procedure in antitrust and merger control

In order to complete the presentation of State aid procedural rules, they will be confronted with those adopted in other fields of competition law i.e. antitrust and merger control.

This comparison is justified, first, by the fact that evolution of procedural rules in state aid points at some adjustment between these two fields: Regulation of 2015 introduced some investigatory tools well known from Antitrust and Merger Regulation. If this is the direction chosen for the development of state aid control, and thus a further alignment is possible, it seems legitimate to look closer at differences between the two sets of rules. Second, similarities with merger control are quite obvious: apart from the *ex ante* character of both types of control, they also provide for the two-stage procedure. Moreover, it is not uncommon to analyse potential changes in state aid procedure by reference to merger law.[39] Finally, leaving aside the debate on whether state aid law belongs more to internal market than to competition law,[40] from the procedural point of view it rather resembles competition rules, e.g. due to the monopoly the Commission has over the procedure. In the context of error analysis, the comparison serves mainly the purpose of highlighting the limits of State aid procedure, whether inherent to its nature or simply not yet addressed.

The investigative powers of the Commission in state aid control are more limited than in other fields of competition law. Similarly, the process of reaching the final decision seems less

[38] ibid, Art. 9(7).
[39] Andreas Bartosch, 'The Procedural Regulation in State Aid Matters. A Case for Profound Reform' (2007) 6 State Aid Law Quarterly 474, 481.
[40] Francesco De Cecco, *State Aid and the European Economic Constitution* (Hart Publishing 2013) 32–42.

complicated in State aid, in the sense that the Commission is required to "do less" than in antitrust/merger proceedings. In other words, the Commission has both less rights and less obligations. This observation pertains to the formal investigation procedure and, *a fortiori*, to the preliminary examination.

Firstly, the Procedural Regulation does not confer on the Commission, at any stage, the power of inspection known from Antitrust[41] and Merger[42] Regulations. According to their twin provisions, the officials authorised by the Commission may enter premises, land and means of transport, examine books and other records, obtain their copies and extracts, seal business premises and books or records, and ask representatives or staff for explanations on facts or documents. The Commission may also impose fines in case of non-cooperation.[43] Additionally, Antitrust Regulation enables the Commission to interview any natural or legal person who consents to be interviewed for the purpose of collecting information.[44]

The power of inspection and of interview has not been conferred on the Commission in state aid procedure following notification. However, some of these powers may be used by the Commission within the framework of on-site monitoring after the aid is approved.[45] Additionally, the recent reform introduced the possibility to address requests for information to undertakings (under penalty of fine) as well as to any Member State, which constitutes some adjustment to antitrust and merger rules.

Secondly, in state aid control the Commission does not consult projects of decisions with any other body. On the contrary, the Advisory Committee, composed of representatives of the competent authorities of the States, must be consulted before the Commission takes the final decision in antitrust and merger cases. [46] Even though opinions of the Committee are not binding, its existence certainly demonstrates an effort of the law-maker to ensure accuracy of judgments made by the Commission and contributes to it. Indeed, although the Advisory Committee almost always agrees with the Commission's draft decisions, it is argued that this is because whenever a NCA finds a decision problematic, it signals and discusses that fact

[41] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 4.1.2003, p. 1–25 (Antitrust Regulation), Art. 20 and 21.
[42] Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings**,** OJ L 24, 29.1.2004, p. 1–22 (Merger Regulation), Art. 13.
[43] Antitrust Regulation, Art. 23(1)d-e; Merger Regulation, Art 14(1)d-f .
[44] Antitrust Regulation, Art. 19.
[45] Procedural Regulation 27(2).
[46] ibid, Art. 14(1).

informally with the case team before even the draft is presented to the Committee.[47] Without carrying out detailed analysis of the role of the Advisory Committee, participation of NCAs must, at least, impose on the Commission respect of a certain quality of assessment and consistency.

It is true that the Advisory Committee on State Aid exists. However, its functions significantly differ from those of its antitrust/merger counterpart and hence, it constitutes a different type of body. It is consulted only before the adoption by the Commission of implementing provisions concerning technical matters, such as notifications, annual reports, complaints, time-limits and interest rates.[48] It does not contribute in any way to the contents of final decisions in state aid cases, even in the formal investigation procedure. There is also no other body exercising a similar consultative function.

Furthermore, Merger Regulation does not limit the powers of the Commission, such as requesting information, to Phase II of the proceedings. Indeed, the Commission uses them "in order to carry out the duties assigned to it by th[e] Regulation."[49] This contrasts with the state aid provisions, where the Commission gains powers only after it decided to open a formal investigation procedure.

Finally, in antitrust and merger control the right of access to the file is accorded to the parties concerned, within the framework of the right of defence.[50] In state aid procedure no actors, not even the beneficiaries, dispose of a similar right. Even though such a solution may be justified by the fact that they are not a party to the proceeding, it has been criticised for denying the right to defence and for undermining the objectives laid down in the Transparency Regulation.[51] The Commission, Court of Justice, and even European Ombudsman confirm that the Procedural Regulation "make explicit their [interested parties'] status as an ***information source*** only."[52] Leaving aside the interested parties' procedural rights, this refusal has broader consequences,

[47] Silke Kegeleers, 'The European Competition Network and the Aspect of Accountability. A Case Study' (Ghent University 2017) 29.
[48] Procedural Regulation, Art. 33-34.
[49] Merger Regulation, Art. 11(1).
[50] Antitrust Regulation, Art. 27(2), Merger Regulation, Art. 18(3).
[51] Bartosch (n 39) 476–481; Francois-Charles Laprévote, 'A Missed Opportunity? State Aid Modernization and Effective Third Parties Rights in State Aid Proceedings' [2014] European State Aid Law Quarterly 426, 430, 437, 439.
[52] *Case 1179/2014/LP on the involvement of "interested parties" in State aid investigations carried out by the Commission* (n 34), para 33.

as access to the file is considered to interact with detection of errors in the Commission decisions.[53]

To conclude, the differences between state aid and other fields of competition law consist in the possibility (or obligation) to take an action in antitrust/merger cases and the corresponding impossibility (or lack of obligation) to take the same action during state aid procedure. In other words, the state aid procedure offers to the Commission less means to obtain, or cross-check, relevant information while it also gives fewer means to third parties to present the relevant information they might possess.

3.3. Conclusion

Discussing the rules of state aid procedure, and then pointing at its limits when compared with antitrust and merger law, raises the question of how much information the Commission may obtain before deciding on a case. On the one hand, the answer is related to the rights and obligations conferred upon the Commission at different procedural stages, which determine the Commission's ability to assess measures. On the other hand, it depends on the quality standards which are imposed on those submitting information. The latter, simply called evidence requirements, are the next step of the analysis.

4. Evidence requirements in State aid procedure[54]

Although the State aid procedure is designed differently for each procedural stage and although both of them lag behind antitrust and merger procedure, the evidentiary standards imposed on actors participating in the procedure impact the quality of information and of State aid assessment based on that information. Indeed, strict evidence requirements could increase the credibility of information provided by the State and in a further perspective, lower the probability of error, while the negative impact of low evidentiary requirements on the accuracy in decision-making is not disputed.[55]

[53] Paul Craig, *EU Administrative Law. Second Edition* (Oxford University Press 2012) 330, 332.
[54] Parts of this section were published in: Anna Nowak-Salles, 'Evidence Requirements in the State Aid Compatibility Assessment' (2018) 17 European State Aid Law Quarterly 212.
[55] Alan Devlin and Michael Jacobs, 'Antitrust Error' (2010) 52 William & Mary Law Review 75, 127; Andrey Makarov, 'Anti-Competitive Agreements in Russian Courts (2008–2012): Antitrust Law Implementation and Interpretation' (2019) 31 Post-Communist Economies 4.

4.1. Evidence requirements and the standard of proof

Evidence requirements shall not be confused with the standard of proof. The latter indicates the required degree of certainty, the threshold beyond which some legal consequences may be attached to the action under examination e.g. the standard of 'more likely than not' or 'beyond a reasonable doubt'. Evidence requirements, on the other hand, show how strict the decision-maker is in recognising the standard – how much and what quality evidence must be submitted in order for the standard to be considered as reached.

Naturally, both questions are related, because evidence requirements are largely determined by the standard of proof: for instance, it is unlikely that weak evidence proves a circumstance beyond any doubt. Consequently, it is possible to approximately deduce the standard of proof, which was not clearly laid down in acts of law and case-law, by examining evidence requirements imposed on the parties to the procedure. Finally, it is imaginable that evidence requirements appear too low or too high with respect to the adopted standard of proof.

In State aid law, it may be considered that in the preliminary examination, the standard of proof is established in the form of "serious doubts" as to the compatibility of aid or the qualification of measure as aid. Even though a weaker or higher standard would certainly impact the percentage of false acquittals and false convictions,[56] there is no aim in this thesis to evaluate whether the standard of serious doubts is, as such, satisfactory; this standard will however be discussed, from the perspective of its application, in the following chapter. In any case, law and practice are silent in what concerns the second stage of the State aid procedure.

When discovering what quality of proof, in practice, a Member State must provide in order to demonstrate a given circumstance, one shall first turn to notification forms. However, since those stop half-way, it is necessary to look into Commission's practice and, briefly as they are scarce, indications contained in guidelines.

4.2. Notification requirements

Basic evidence requirements are contained in notification forms. For the majority of aid measures, a Member State needs to provide two forms: a general form and a supplementary information sheet, whose content depends on the guidelines applicable to the individual case.

[56] Evans and Padilla (n 10) 21.

4.2.1. The general notification form

The general form asks about basic data, such as the amount and form of aid, its beneficiaries, duration of aid and others.[57] The State is not required to provide any evidence, it simply declares that information provided is, to its knowledge, accurate and complete. This naturally could raise doubts about whether the completeness and correctness of information are guaranteed.

The general notification form applies mainly to information necessary for the assessment under Article 107(1)[58]: this assessment has been excluded from the scope of this thesis. In any case, as it will be mentioned below, the State may be considered to have the best knowledge as regards the characteristics of the measure it designed itself. Furthermore, the very basic character of information required makes mistakes or cheating by the State less likely. Finally, if the State does not submit the correct information (e.g. declared a lower amount of notified aid) and subsequently obtains the Commission's approval, the exceeding amount of aid or aid granted in other form will be considered to be illegal and may be subject to recovery.

4.2.2. Supplementary information sheets

Supplementary information sheets require exhaustive information about the aid measure: apart from qualification of measure as aid, they refer to criteria laid down in the applicable guidelines.[59] It is straightforward that their function is to provide the Commission with extensive information on the measure for the purpose of its assessment, but it may also help a Member State auto-evaluate its project before it is notified. It is pertinent to verify whether information sheets regulate only the volume of information or address, in addition, the question of evidencing States' statements in order to ease verification of reliability of information provided.

First, the questions the State must answer are very detailed; second, any information provided must be justified. The latter objective is realised by obligations to 'specify' and to 'provide details', 'evidence', 'relevant studies' and 'documents', which are attached to virtually every question. Elements of aid treated quite superficially in the general form, like market failure, necessity, appropriateness, incentive effect or proportionality, are analysed extensively.

[57] The general notification form is available at: http://ec.europa.eu/competition/state_aid/legislation/forms.html .
[58] An explanation of necessity, appropriateness, incentive effect and proportionality of aid is only mentioned in the general form, but is subject to a detailed analysis and evidence requirements in the supplementary sheets.
[59] The supplementary information sheets for all types of aid are available at: http://ec.europa.eu/competition/state_aid/legislation/forms.html .

The obligation to provide detailed information and supporting evidence should make it more difficult for the State to submit erroneous or false information or to withhold some of it. Additionally, gathering information and evidence itself allows the State to verify and assess information previously received from the beneficiary. That could resolve the problem of evidence for simple pieces of information.

However, whenever the information required is complex and the assessment criteria ambiguous, very general suggestions on evidence may not, without the discipline of Member States' themselves, ensure a good quality of information and consistency in the standard of evidence provided by Member States. Indeed, supplementary sheets do not impose uniform conditions as regards the quality of evidence, so that the level of precision of information and the quality of evidence submitted by the States may vary from one measure to another – 'providing evidence' or 'specifying' may be understood broadly. Therefore, the information sheets do not raise or lower the quality of information the Commission obtains through the notification, but they leave it to the discretion of Member States.

In light of the inconclusive character of notification forms, it should be useful to analyse the specific provisions of guidelines as well as the decisional practice of the Commission in order to further investigate the actual evidence requirements followed by the Commission when carrying out the procedure.

4.3. Evidence preferences expressed in guidelines

In some cases, guidelines point directly at the particular evidence the State might attach to the information it provides. For instance, as regards contribution to an objective of common interest, the State may rely on "on evaluations of past State aid schemes, impact assessments made by the granting authorities, or expert opinions"[60] or on the beneficiary's business plan[61], and it may demonstrate the market failure on the basis of sectoral comparisons and market studies.[62] Assessment of appropriateness would preferably be based on impact assessments.[63] With regards to the incentive effect, the assessment may be based on official board documents,

[60] RAG, para 33.
[61] RAG, para 41.
[62] RDI Framework, para 52.
[63] RAG, para 54, RDI Framework, para 58.

risk assessments, financial reports and others, and by calculations of the net present value of the project, the internal rate of return and the average return on capital employed.[64]

The guidelines contain many such indications, which refer both to assessment criteria in general, as well as, more specifically, to individual aid, investment or operating aid. If followed by the notifying State, these guidelines create good chances that information provided to the Commission will be reliable and easily verifiable. However, it needs to be kept in mind that the guidelines offer only suggestions, which are up to a diligent Member State to take on board, but which may also be ignored. Inasmuch as no binding rules are laid down, it is interesting to examine the Commission's practice in assessing the quality of evidence.

4.4. Commission's position towards evidence provided by the State

The Commission's decisional practice in evaluating the quality of evidence might be judged as relatively lenient. Given that the States are granted a significant liberty as regards proving information they provide, the Commission does not limit the risk this freedom brings.

More precisely, the quality of evidence and of information provided by the State depends on the State itself. Indeed, there are cases in which the State provides very detailed information, accompanied by studies and estimations, and there are others, in which it submits much more modest evidence, focusing on its own speculation and presentation of the context. A representative of the first group is the case on an environmental aid SA.39723. 16 out of 24 pages of the decision are composed of information and observations provided by Germany, which relied on detailed tables, maps, studies and expert reports contributing to a detailed financial analysis. The Germany's submission is practically free from political considerations and it always comes down to, or refers to, hard evidence and data provided.[65] Similar level of detail and reference to numerical data and experts' projections may be observed in the decision on a RDI aid SA.37131.[66] These decisions contrast e.g. with case on a rescue aid SA.38129, where no analysis of the market, potential distortions or any concrete independent studies were presented, expect for the financial reports of the company concerned. In four paragraphs of the decision outlining the measure as notified by the Italian authorities, it was stated that the exact

[64] RAG, paras 72 and 73, EEAG, para 61 and 63, RDI Framework, paras 68-70.
[65] Commission decision of 16 April 2015 on state aid cases SA.39723, SA.39724, SA.39725, SA.39726, SA.39731, SA.39732, SA.39733, SA.39735, SA.39738, SA.39739, SA.39741, SA.39742 (2014/N); SA.39722, SA.39727, SA.39728, SA.39729, SA.39730, SA.39734, SA.39736, SA.39740.
[66] Commission decision of 27 March 2014 on State Aid SA.37131.

conditions of the credit lines were not yet defined.[67] Similarly, in the decision on an environmental aid SA.34992, Finland provided extensive financial information but in the assessment of criteria laid down in guidelines, the Commission several times based its evaluation on the fact that "Finnish authorities argued" e.g. that markets for forest chips differ greatly from other fuel markets, that the amount of peat is insignificant, or that the gasifier premium could have been granted also in the form of investment aid, but the aid amount would have increased substantially and the risk of overcompensation would have been much higher.[68] In all above situations, the Commission was rather uncritical and issued a decision not to raise objections. Therefore, in some cases States *prove* their statements, while in others they *convince* the Commission to their statements. This inconsistency between different States' approaches is quite impressive and readily noticeable throughout the reading of decisions.

Moreover, the demarcation line between better and worse-quality evidence is drawn along the criteria concerned. For some criteria, especially the incentive effect, submission of hard evidence recommended in guidelines has become the routine. For others, such as demonstration of the market failure, provision of required elements by the State very often do not engage any evidence of economic nature or does not include even the documents suggested by the guidelines.[69]

As far as this observation pertains to the majority of decisions not to raise objections, the same allegation may not be addressed to decisions issued in Phase 2. Indeed, the latter are much more detailed in that the Commission requires the State to substantiate its statements, if not by strong evidence, at least by a very detailed explanation. Yet, the very opening of the procedure (and the real threat of prohibiting the aid) seem to motivate the State to be more precise and to increase the credibility of its statements.

A situation is also different in cases concerning RR aid. In this area, the Commission generally expects the States to recur to external reports, studies, company documents and other evidence, and it does not hesitate to reject assumptions insufficiently proven. This is the case of sources of own contribution, which happen to be found unreal[70] or not free of aid,[71] or whose amount

[67] Commission decision of 11 March 2014 on State Aid SA.38129.
[68] Commission decision of 24 June 2015 on State Aid SA.34992.
[69] E.g. Commission Decision of 20 November 2013 on State Aid SA.35092, paras 60-83, apart from a few articles submitted; Commission Decision of 14 August 2015 on State Aid SA.39457, paras 38-60.
[70] E.g. Commission Decision 2017/1021 of 10 January 2017, para 311, and Commission Decision 2016/289 of 8 June 2015, para 182.
[71] Commission Decision 2016/289 of 8 June 2015, para 175, and Commission Decision 2015/1091 of 9 July 2014, para 214.

is not confirmed by independent valuations,[72] as well as failures in demonstrating that the firm's closure would cause competition problems,[73] lack of evidence that undue distortions of competition would be avoided by proposed compensatory measures[74], or unreliable scenarios[75]. Unlike when applying RR guidelines, in other areas the Commission does not explicitly refer to questions of evidence, and rather directly builds on the evidence provided by the State, whatever its quality.[76] Strict requirements with regard to RR aid may be related to the belief that measures contributing to horizontal objectives are generally less distortive than, for instance, measure saving failing companies, the indulgency which has serious consequences that will be discussed in the following chapters.

4.5. Conclusion

What may be derived from the wording of notification forms, guidelines and Commission's decisions, is that the notion of 'evidentiary standard' in state aid procedure is blurred. The evidence shall of course be attached to the submitted information, but the quality of this evidence has not been subject to harmonisation. As a result, it is up to the actor submitting information to select more or less credible proof for its statements, and the Commission seems to feel comfortable not intervening into that discretion.

Raising directly evidence requirements by the Commission[77] may appear attractive but is risky, because it would need to account for difficulties in proving future developments. Indeed, assessment of future impact of a measure intrinsically is speculative. While a direct evidence may be more or less available depending on the case, it is generally limited in *ex ante* assessments.[78] The fact that in some cases the States provide detailed evidence does not mean it would be possible in similar cases: with tight requirements some good aids would be rejected due to the lack of evidence, thus replacing one error by another. Hence, the very nature of the *ex ante* control precludes strict evidentiary standards so that the latter alone may not ensure that the information obtained is reliable and high quality. This conclusion is important to make, because it means that the informational problems the Commission may face in a State aid

[72] Which may be also considered as a part of their actuality and reality, e.g. Commission Decision of 16 July 2015 on State Aid SA.38528, para 113, and Commission Decision 2015/1073 of 9 January 2015, paras 168-170.
[73] Commission Decision of 16 January 2015 on the State Aid SA.31855, para 137.
[74] E.g. ibid, paras 141 and 142.
[75] E.g. Commission Decision 2015/1073 of 9 January 2015, paras 153 and 154, and Commission Decision 2017/1021 of 10 January 2017, paras 230-232.
[76] Just like in the cases mentioned in Section 3.4.
[77] Thus reducing the expected cost of error, see: Evans and Padilla (n 10) 23.
[78] Within the framework of merger analysis: Devlin and Jacobs (n 55) 105–109.

assessment may be overcome only if hard evidence is available and when the State wishes to provide it. In the opposite case, the Commission needs a different solution to ensure well-informed examination.

This solution is to be looked for in other potential sources of information: if it is not the State, the Commission could obtain information from other actors who are willing or able to submit detailed information. This is why evidentiary issues must be read in conjunction with another, essential arrangement of State aid control – the omnipresence and monopoly of the State over the procedure. Such analysis allows to obtain a full picture of State aid procedure, relevant in the context of analysing error in decision-making.

5. State as the main procedural partner - imperfect information

Having explained the procedural rules and evidence requirements in state aid assessment, this section will endeavour to put the finger on the resulting problem, which is the information the Commission may have at its disposal when deciding on a state aid case. Clearly, information is the basis for decision-making, and the relationship between the amount of information and error is relatively straightforward.[79]

Therefore, the role of information in deciding on a case will first be explained. Some practical problems related to obtaining perfect information, and the role of procedural rules and evidence requirements in that regard, will be discussed. Subsequently, the pursuit of perfect information will be confronted with the informational asymmetries that emerge in state aid control, which are intrinsically related to the decisive role of the Member State in the procedure.

5.1. Gathering information to make a correct decision

Intuitively, if the Commission has perfect information on the measure and its potential effects, the result of the evaluation must be correct, while it is not guaranteed when the Commission has only imperfect information; depending on the character of information required, imperfect

[79] Kai Hüschelrath and Sebastian Peyer, 'Public and Private Enforcement of Competition Law - A Differentiated Approach' (2013) 12; concerning gathering of information and selection of evidence by the litigants: Steven Shavell, *Foundations of Economic Analysis of Law* (Belknap Press of Harvard University Press 2004) 451. Naturally, the processing of some types of information may entail high costs, or there may exist difficulties in interpretation that lead to errors. However, this issue will not be examined in detail, as this section does not aim to plainly engage into the theory of information gathering and highlights only its general points.

information *will* or *may* lead to error. Indeed, when the Commission interprets information and reasons based on many pieces of information, it may well make a correct decision even being under-informed. However, the decision *will* be erroneous when it depends on only one crucial piece of information, e.g. 'technical' information, constituting a basis for calculations or thresholds. On the other hand, obtaining and assessing one piece of unequivocal information is simpler and less prone to manipulation than a reasoning based on many, especially ambiguous, pieces. Both of these situations occur in the assessment of state measures and will become central for the discussion in the following chapter.

In order to decide on a case correctly and in the most efficient manner, the Commission should identify the necessary and sufficient pieces of information, actors who hold them, those who hold the most of them, and extract from the totality of information necessary and only necessary information at the lowest cost.[80] Naturally, it is hard to imagine the Commission could possess such knowledge at the moment in which it receives a notification. The role of notification is crucial, because not only it provides the Commission with initial information on the measure (which already creates the state of under- or over-information), but it also shapes the Commission's assessment whether, and how much, other information needs to be gathered.

While the probability of adopting a correct decision is a positive function of the amount of evidence, information gathering and processing is costly[81] so that a good strategy to collect the best available information at the lowest cost is crucial. At the end, a balance needs to be struck between the risk of being under-informed and committing an error on the one hand, and that of being over-informed and wasting resources on the other.

5.2. The role of procedural rules in information gathering

In State aid assessment, the cost related to information gathering is first borne by the Member State that submits the notification. This issue lies outside the scope of this thesis, although the quality of information provided by the State will be discussed in the section below on

[80] Indeed, the decision-maker should take into account that different messages, which are obtained at different price, may trigger the same course of action, so it is unnecessary to cumulate repetitive information. Built on: James R Jackson, 'On Decision Theory under Competition' (1968) 15 Management Science 23.
[81] Richard A Posner, 'An Economic Approach to the Law of Evidence' (1999) 51 Stanford Law Review 1477, 1481.

informational asymmetries. Following notification, the Commission needs to decide what kind of other information, and from whom, it shall solicit, without risking too high of a cost. This is where procedural rules intervene.

5.2.1. The cost of gathering information

The cost of information gathering is not limited to financial costs (borne both by the Commission and by those who have to provide it), but it includes also increasing the length of procedure, stopping the beneficiary from obtaining aid when it is compatible with the internal market or precluding officials from working on other cases. Increased accuracy comes at the price of a lengthier and higher quality process.[82] Moreover, the benefit obtained from a given piece of information is usually known only once the costs of obtaining it are already borne (when the information is in fact obtained).[83]

Ultimately, it comes down to the cost-benefit analysis: whether the cost of obtaining an additional piece of information (the increase in costs) is lower than the benefit from obtaining this information (the increase in the expected gain from a lower probability of error).[84] If it is, it is socially advantageous that the Commission tries to obtain information.

However, at one point it will become preferable to expose itself to the risk of error than to investigate further. In other words, information gathering should continue until "the last bit of evidence obtained yields a reduction in error costs equal to the cost of obtaining it".[85] After this point, imperfect information, and hence errors it may bring about, must be accepted: this is another reason for which errors in enforcement may not be completely avoided. Still, alternative solutions, such as their elimination by appellate bodies, may be considered.

5.2.2. Procedural rules as the result of a cost-benefit analysis

Naturally, the cost-benefit analysis may not be carried out with regards to every piece of information in each case, especially taking into account above-explained uncertainties

[82] Shavell (n 79) 451.
[83] Klaus Mathis, *Efficiency Instead of Justice? : Searching for the Philosophical Foundations of the Economic Analysis of Law* (Springer 2009) 12.
[84] Shavell (n 79) 461. It should be recalled that this benefit is calculated as the value of information multiplied by the probability that it will be obtained. For example, the Commission sends a request for information to an undertaking. This piece of information is worth 10 but there is only 50% chance that the undertaking in fact possesses it and is able/willing to disclose it. Therefore, the expected benefit will be 5.
[85] Richard A Posner, *Economic Analysis of Law* (Wolters Kluwer Law&Business 2007) 22.1.

regarding information (e.g. about whether somebody in fact possesses the desired information). At the end, carrying out such an analysis has its costs itself.

Then, this is the role of procedural rules to strike the balance between the indefinite pursuit of perfect information and the costs this pursuit brings. If these rules are efficient, they will ensure obtaining the most information (getting as close as possible to perfect information), before its cost exceeds the benefit. It may therefore be said that the procedural rules contain (or at least they should and are supposed to contain) solutions to a previously conducted cost-benefit analysis, the result of which applies to every case.

For this purpose, abstractly designed rules contain some implicit assumptions, e.g. regarding who possesses the most of information, as well as rules as to what investigative powers the Commission has or how long the procedure shall last. Moreover, they respond to the risk of error by indicating 'how to err': that is, what decision should be adopted in case of uncertainty. It might be said that procedural rules introduce some more realistic version of 'the more you know, the less you don't know' strategy. Nevertheless, although necessary, procedural rules have neither to provide for efficient solutions nor to introduce correct assumptions.

Certainly, "the accuracy of the [...] process is influenced by its design".[86] The core element of the State aid design is a disproportionately strong position of the notifying Member State in the procedure, which, however, amplifies the effect of limited procedure and weak evidence requirements.

5.3. Informational asymmetries in state aid procedure – disadvantages of relying on the State

The Commission's position at the beginning of State aid procedure is disadvantageous inasmuch as it does not know much about the measure itself, not does it know well how, at the moment of notifying the aid, the particular national (regional, local) market and its actors operate. Hence, knowledgeable persons should be encouraged to, and the Commission should be able to force them to, disclose information necessary to correctly assess the measure.

During the procedure, the Commission may obtain information from the notifying state, other states, undertakings, their associations and any interested party submitting comments. However, its main partner throughout the procedure, and the exclusive one in the preliminary

[86] Shavell (n 79) 451.

examination, is the notifying state. Apparently, the law-maker assumed that information provided by the State shall be sufficient, and in any case crucial, to secure the correct outcome, which shall justify involving it in the procedure as much as possible. This choice determines the whole architecture of state aid control, leaving much less room for interaction with other actors.

In this section, the assumption that the State is the best partner in state aid control will be judged in the light of informational asymmetries, which may be observed between different actors in state aid procedure. This is to demonstrate that informational asymmetries constitute an additional obstacle to gaining perfect information and that they may be an important factor for increasing decisional errors. Indeed, relying on the State may be a risky way to achieve the accuracy in decisions – it may have the opposite effect.

In this context, two types of informational asymmetry may be observed: between (1) the Commission and the State and (2) the State and other market operators. These asymmetries and possible ways of overcoming them will be discussed below.

5.3.1. Informational asymmetry between the Commission and the State

Certainly, the Commission knows less than the State does. The State has broader knowledge on virtually all points related to the measure: it has an informational advantage over the Commission. This fact may not be argued and therefore, a dialogue with the State seems necessary: this finding is reflected in the notification obligation, requests for information and strong involvement of the State at all procedural stages. However, there exist reasons for which this dialogue should not be exclusive: the first one will be discussed in this section while the other one, which in fact constitutes the second informational asymmetry, will be analysed in the section below.

The first problem is that the informational asymmetry between the Commission and the State may not always be overcome by the interaction with the State itself. Indeed, the latter actually wants to grant aid: it is not an impartial actor providing information. Rather, it acts in its own case and therefore, it naturally advocates for approving the measure. It has already been pointed out that the probability of error rises when the adjudicator has only one direct source of

information about a given fact, because the holder of this information may try either not to reveal it or to bias it.[87]

Even though it may well be that the Member States accepted state aid control and generally act in good faith, it is difficult to argue that the willingness to act at the expense of internal market, especially at the rise of euro-sceptic governments, has completely disappeared. It is still true that governments may be willing to benefit from short-term benefits of aid rather than focus on the long-run harmful effects.[88] The fact that the states are not indifferent about Commission decisions may also be observed in their determination in having the state aid approved[89] and negative decisions annulled.[90] The possibility of a State purposefully granting incompatible aid has also been admitted by Advocate General Jacobs.[91] Finally, works on changes in procedural law allowed to observe the States' intention to keep the rules close to their own interests. For instance, if the rights of third parties are kept way below standards adopted in other fields of EU law, it may be because these rights go against the States' interests in granting aid.[92] Moreover, it was observed that while the Member States were glad to make the list of categories eligible for exemption longer than initially proposed by the Commission, the adoption by the Council of the first Procedural Regulation was characterised by attempts to prevent a smooth use of some of the Commission's powers, for example by rendering the suspension injunction difficult to apply in practice.[93]

It is thus imaginable that a Member State contravenes its obligation of sincere cooperation and acts in bad faith. It does not necessarily have to provide a false information; it is sufficient that this information is incomplete. The State may deliver only as much information as necessary to adopt the positive decision or deliver information of a particular kind, allowing to obtain the

[87] Mark Anderson and Max Huffman, 'Iqbal, Twombly, and the Expected Cost of False Positive Error' (2010) 20 Cornell Journal of Law and Public Policy 1, 25. The analysis concerned a situation where only one actor possessed the relevant information. However, the reasoning may be transposed to a situation, where only one actor is interrogated about a fact, even though there may exist other holders of the information.
[88] David Spector, 'State Aids: Economic Analysis and Practice in the European Union', *Competition policy in the EU : fifty years on from the Treaty of Rome* (Oxford University Press 2009) 180.
[89] Quite undisguised in some cases, e.g. in Commission decision 2016/632 of 9 July 2014 and Commission decision on State aid C27/08. In both cases, Germany strongly argued in favour of the aid measures, contradicting the Commission's reasoning.
[90] Around 40% of Commission's negative decisions form the object of an action for annulment: they are usually brought either by the Member State concerned or by the aid beneficiary with the State intervening in its support.
[91] Opinion of AG Jacobs to case C-24/95 *Land Rheinland-Pfalz v Alcan Deutschland GmbH* (1996) ECLI:EU:C:1996:433, para 26.
[92] Bartosch (n 39) 480–481.
[93] Vittorio Di Bucci, 'The Modernisation of State Aid Control and Its Objectives: Clarity, Relevance, Effectiveness' (2014) 2014 Italian Antitrust Review 12–13.

green light. It may submit incomplete notifications and provide information only at the request of the Commission, hoping that the latter does not ask for everything it knows.

Furthermore, the States act repeatedly so they learn how the Commission operates the control and hence, they learn not only how to cooperate but also how to act in order to secure "a win". Indeed, permanent education of national authorities in the field of State aid, whether occurring naturally or enhanced by the Commission for the purpose of a more aware and effective application of State aid, has as a secondary effect that Member States become able to circumvent the rules in a more sophisticated and convincing way.[94] In other words, the Member States may try to 'test the Commission's limits' and see how far they can push their own interpretation.[95] Misleading the Commission has as another consequence that the Commission will probably not realise that it has imperfect information since all elements necessary for the analysis are delivered, however incomplete.
Obviously, it is a rather pessimistic version and there is no claim here that this happens on a daily basis. However, this certainly is one of the risks brought by the procedure where the only witness is the defendant. Its result may be that the informational asymmetry between the Commission and the State is not eliminated and thus the Commission has imperfect information, leading to an error.

If not by an exchange of information with the State, this informational asymmetry might be circumvented by recurring to other actors, who possess the same information while they are more neutral. Indeed, it is not only the State who has informational advantage over the Commission: there is an informational asymmetry of the same kind between the Commission and other market operators. It might be overcome by way of requests for information, submission of comments, oral hearings, inspections etc. Similarly, granting access to the file would allow other informed actors, e.g. aid beneficiary and in particular competitors, to identify and fill in gaps in information provided by the State.[96] This could secure the correct outcome

[94] Phedon Nicolaides, 'State Aid Modernization: Institutions for Enforcement of State Aid Rules' (2012) 35 World Competition 462.
[95] Phedon Nicolaides, 'Control of State Aid in the European Union Compliance, Sanctions and Rational Behaviour' (2002) 25 World Competition 251.
[96] Massimo Merola and Marie Debieuvre, 'The New Approach to State Aid: Contributions and Limits Form Case Law of the European Courts', *Competition law and economics : advances in competition policy enforcement in the EU and North America* (2010) 414.

of the assessment while avoiding the mentioned risk, thus constituting the instrumental rationale for procedural rights of third parties.[97]

This problem could also be resolved by increasing the willingness of states to cooperate. This 'willingness' could be forced on the States by establishing more dissuasive safeguards, such as sanctions for not responding to a request for information or for submitting untruthful information, just like in the case of undertakings. However, it is unlikely since even in the most recent Procedural Regulation the possibility to impose sanctions was introduced only with regard to undertakings, and not the States.

Finally, the Commission could gather some information of its own motion (e.g. by operating a market delineation), which could also act as a deterrent for the States withholding or distorting information. Currently, the Commission may carry out sector inquiries in order to discover potential infringements, but this power is related to the time before an individual State aid procedure is opened. The Commission does not have any sources of information other than the Member State or market operators.

However, even supposing that a State cooperates exemplarily, another problem may occur. This problem is the second type of informational asymmetry, which may be observed in state aid.

5.3.2. Informational asymmetry between the State and market operators

The problem of imperfect information the Commission may face when issuing a decision may be completely unrelated to good or bad faith of the notifying State. Indeed, the latter simply does not always possess all information related to the measure.

In general, the State has less information on the market concerned than private actors operating on it.[98] For instance, the State may be under-informed on the state of economy, necessary to determine "the appropriate amount and method of aid,"[99] or on the costs borne by the recipient of aid, relevant in the context of incentive effect.[100] The State may lack or have incomplete information on whether there exists a market failure and consequently, whether the aid will

[97] Craig (n 53) 295–296.
[98] In the context of designing an efficient industrial policy: Anne Perrot, 'Do National Champions Have Anything to Do with Economics?', *Competition law and economics : advances in competition policy enforcement in the EU and North America* (Edward Elgar 2010) 297–298.
[99] Sanoussi Bilal and Phedon Nicolaides, 'An Appraisal of the State Aid Rules of the European Community: Do They Promote Efficiency?' (1999) 33 Journal of World Trade 97, 30.
[100] Leigh Hancher, Tom Ottervanger and Piet Jan Slot, *EU State Aids* (Sweet & Maxwell 2016) 2–041.

effectively solve it.[101] Therefore, the State knows less than other economic actors, so that the latter have an informational advantage over the State and, *a fortiori*, over the Commission.

The informational advantage that market operators have over the State may be abused when the former discloses information to the latter. As it has been pointed out, "the private sector seeking to benefit from state aid possesses information not directly available to the government, which thus runs the risk of being misled when designing and implementing its aid policy."[102] This situation is similar to the first informational asymmetry: the potential beneficiary wants to obtain aid and thus transfers to the State information that shall allow it to succeed. If such aid presents the risk of being prohibited at a later stage, it is in the interest of the potential beneficiary to keep the granting authority under-informed. Besides that, even if a beneficiary acts in good faith, it has only limited competence to interpret assessment criteria necessary to provide the State with information for notification. Hence, if the information required is too complex or open to interpretation, the beneficiary may himself unconsciously misinterpret it, and thus provide incomplete or misleading information to the State. In both cases of intentionally and unintentionally misleading the State, the latter, acting in good faith, may further transfer imperfect information to the Commission.

On the other hand, it might be argued that before state aid control takes place, the State carries out some national procedure in order to decide whether the measure could be granted. This way, it gathers information necessary also for the Commission's assessment. Although, relying on national standards, within the framework of which the quality of investigation necessarily varies from one State to another and from one measure to another, may seem precarious. Moreover, it is the Commission's, and not the State's task, to evaluate the measure in the light of EU law: the Commission is responsible for information gathering and the State does not have to analyse all the possible scenarios, replacing the Commission's investigation with its own one. Furthermore, it could be supposed that the State exchanges information with the undertakings concerned, e.g. when it receives a request for information. However, it has been observed that the State sometimes tends to answer based on its (limited) knowledge, without approaching the more informed actors.[103]

[101] As required by: European Commission. 2005. *State aid action plan - Less and better targeted state aid : a roadmap for state aid reform 2005-2009*, COM/2005/0107 final (SAAP), p. 7.
[102] Bilal and Nicolaides (n 99) 30.
[103] Bartosch (n 39) 479–480.

In any case, as it has been explained above, interaction between the State and other actors does not mean that all information, especially unfavourable, will be disclosed. Broadly speaking, it may happen that this informational asymmetry is overcome by the State, but it is far from certain it will.

As in the case of the first asymmetry, a solution could be to involve other actors into the procedure, by increasing investigatory powers of the Commission or giving access to the file. The accuracy of information could be ensured by fines and requests to multiple actors. Moreover, relying on private parties has the advantage of eliminating the political pressure, which may impact the character of the exchange between the Commission and the State. The Commission could also gather information on its own, e.g. by identifying the relevant market.

5.3.3. One asymmetry instead of two?

It has been explained that relying mainly on the State has serious shortcomings: even supposing that the State wants to cooperate, it may not be well-informed. At the same time, it does not seem that the State possesses any exclusive or particularly high-quality information. The solution to each of the asymmetries emerges to be either to make the Commission examine the market on its own, or to involve other actors in the procedure,[104] or both.

As a result, the two identified informational asymmetries could be replaced by one: between the Commission and other market operators. Moreover, this asymmetry could be more easily overcome not only by having more than one discussion partner, but also by the possibility of imposing fines in case of non-cooperation. Although, such a solution seems hardly imaginable since losing the prominent position does not lie in the interest of the States while these are the States themselves that would have to introduce a change of this kind.

5.4. Conclusion

The consequences of imperfect information, and at the same time practical difficulties in obtaining (perfect) information, require some decisions at the procedural level. The main choice made by the law-maker in state aid control is to highly rely on information provided by the State. However, it has been demonstrated that because of difficult to overcome informational asymmetries, the exclusive dialogue with the State threatens the accuracy in decisions and that

[104] For instance, requests for information addressed to undertakings could allow to overcome both asymmetries, as suggested by Di Bucci (n 93) 20–21.

therefore, other solutions should be envisaged and applied. This only adds up to the weaknesses of the State aid procedure and of the evidence requirements discussed above.

6. Conclusion

This chapter has discussed several important issues, which constitute the basis for a proper discussion on the expected cost of error in State aid assessment. On the one hand, it explained what errors in assessment consists in, by explaining the difference between Type 1 and Type 2 errors, depending on the object of the assessment (107(1) or (2)/(3) TFEU) and the procedural stage (Phase 1 and Phase 2 errors). On the other hand, it touched upon three elements, related to the procedure, which determine the design of State aid law in the context of probability and cost of error. First, the description of the procedure highlights differences between the two procedural stages, and the comparison with antitrust and merger procedure shows that State aid one involves less rights and obligations of the Commission. Second, the potential weaknesses of the procedure are corroborated by leniency towards evidence required, as neither notification, guidelines, nor the Commission's practice impose strict evidence requirements. Finally, excessive reliance on information provided by the State is dangerous due to informational asymmetries between the Commission, the State, and market operators, which may lead to serious informational problems.

These considerations set the stage for more precise reflections on the components of the expected cost of error and the ways to lower it down. Out of all, they impact in the first place the probability of error, namely the ability to carry out high-quality assessment imposed by acts of soft law. This shall be the first issue to turn to, which will take place in the following chapter: how the procedural arrangements determine the capacity to apply rules and how to find the rules which may be applied with the highest accuracy

Chapter II – Probability of error in State aid assessment

1. Introduction

The above preliminary considerations on State aid law allow to proceed to the core of the discussion on the expected cost of error, i.e. the probability of error multiplied by its cost. This chapter will focus on the first of these variables and will leave aside, for now, the cost of error. In order to investigate the risk of error in EU State aid assessment and subsequently, to suggest how to reduce it, the probability of error will be related to the choice of the optimal complexity of the assessment rule. More specifically, simple and complex rules will be linked to two components of an error, where reduction of one risk leads to an increase in the other. Subsequently, the proneness to error under simple and complex rules will be applied to the two procedural stages of State aid control. It will be demonstrated that the preliminary examination and the formal investigation, given their objective and design, each have a different optimal rule: necessarily simpler in the former and more complex in the latter procedure.

Building on that observation, State aid assessment criteria will be assessed in light of their complexity with the aim to estimate whether complexity varies from one criterion to another as well as how it evolved. This analysis will allow to conclude that the current set-up does not take account of the optimal complexity, because it foresees only one set of criteria, which create a risk of error, in particular in the preliminary examination. In addition, the fact that an overwhelming majority of decisions are taken in Phase 1 exacerbates the problem. Consequently, the Commission, and to a lesser extent the Court of Justice, should carry out an analysis of assessment criteria in light of error in their application, in order to get closer to the optimal complexity at both stages and hence, to a better decision-making.

2. The probability of decisional error and the complexity of the assessment rule

The probability of error, or accuracy in decision-making, contains itself in the question of the optimal complexity of the assessment rule. Indeed, there exists a direct relationship between the probability of decisional errors and the choice of the rule, as the latter decides on a more or less effective distinction between desirable and undesirable practices.

Identification of two extreme types of decision rules appears under different names, such as per se vs. rule of reason,[1] standards vs. rules[2] or different complexity of rules.[3] The search for the optimal rule is well-known in the literature on European antitrust, where it translates into form-based versus effect-based approach, and has a rich history in the U.S. antitrust. Shaping complexity as a technique to increase accuracy is founded on the observation that different types of rules allow to distinguish between desirable and undesirable measures to a different extent, so that this framework may be validly applied beyond antitrust, also to State aid law.

2.1.Simple versus complex rules

One may place rules on the scale from very precise and straightforward (simple) to open-ended and ambiguous (complex), and by moving an assessment rule on the scale, he will obtain different probabilities of error. Since the optimal assessment rule needs to factor in an effective distinction between good and bad practices and at the same time the potential to correctly apply the rule, the outcome of this weighing exercise will vary especially as the latter value changes. The extremes, between which one shall find the optimal rule, may be characterised in the following way.

A complex rule is embedded in the assumption that the same behaviour, under different circumstances, may be either beneficial or harmful. Therefore, the rule consists in open-ended criteria, which are interpreted in light of the circumstances of each individual case. Such case-by-case analysis shall allow to more effectively distinguish between desirable and undesirable actions, because it takes account of specificities of each situation. Consequently, assessment based on a complex rule entails interpretation of factual and legal circumstances of the case and thus requires often subjective and complex information. Moreover, submission of information may already involve some interpretation of the situation, reflected either in the choice of information provided or its presentation. Consequently, the disadvantage of the complex rule lies in the fact that its application requires a certain amount of information about the behaviour and its effects to be gathered and assessed in every case; in other words, a complex rule entails

[1] Arndt Christiansen and Wolfgang Kerber, 'Competition Policy with Optimally Differentiated Rules Instead of "Per Se Rules vs Rule of Reason"' (2006) 2 Journal of Competition Law & Economics 215; C Frederick Beckner III and Steven C Salop, 'Decision Theory and Antitrust Rules' (1991) 67 Antitrust Law Journal 41, 62–67; Willard K Tom and Chul Pak, 'Toward a Flexible Rule of Reason' (2000) 68 Antitrust Law Journal 391, 391–400.
[2] Isaac Ehrlich and Richard A Posner, 'An Economic Analysis of Legal Rulemaking' (1974) 3 The Journal of Legal Studies 257.
[3] Louis Kaplow, 'A Model of the Optimal Complexity of Legal Rules' (1995) 11 Journal of Law, Economics, & Organization 150, 150–163.

relatively high regulation costs.[4] The response to that requirement might be to increase the expenses on information gathering and invest in more precise analysis.[5]

On the opposite side lie simple rules, which consist in precise, univocal criteria, and which allow to qualify certain types of behaviours as harmful or harmless without individual assessment: they declare an action to be legal or illegal by the simple fact of being qualified as a pre-defined behaviour. Thus, information used for such assessment often covers numerical data and clearly defined, unambiguous information needed to answer straightforward 'yes or no' questions. Its character makes the assessment, evidence requirements and the decision about the completeness of information relatively uncomplicated. Moreover, since simple rules do not envisage case-specific investigations, they are related to lower regulation costs. Indeed, the cost of gathering and assessing information about the measure is borne only once, at the moment in which the simple rule is elaborated. The trade-off consists in the risk that a simple rule does not fit all situations: the same behaviour may be either desirable or undesirable depending on the circumstances of the case, while generalization does not allow to take account of individual situations.

The utility of a rule depends on the character of investigation that is carried out: for instance, impossibility to obtain information on long-term effects of a practice might argue against the use of large inquiries, usually associated to complex rules.[6] Overall, when choosing one rule over the other, it is necessary to turn to their costs, one of them being the cost of error. Indeed, "the optimal decisional rule depends critically upon the cost of being wrong": it should minimize the sum of the costs of Type 1 and Type 2 errors (plus the costs of decision-making).[7] Accordingly, it has been observed that complex rules effectively distinguish beneficial from harmful conduct only if decision error costs are lower than under the corresponding simple

[4] Christiansen and Kerber (n 1); David S Evans and A Jorge Padilla, 'Excessive Prices: Using Economics to Define Administrable Legal Rules' (2005) 1 Journal of Competition Law and Economics 97, 116–119; Herbert Hovenkamp, 'Post-Chicago Antitrust: A Review and Critique' [2001] Columbia Business Law Review 257, 318–323; Beckner III and Salop (n 1) 62–67; Jonathan B Baker, 'Taking the Error out of the "Error Cost" Analysis: What's Wrong with Antitrust's Right' (2015) 80 Antitrust Law Journal 1.

[5] Christiansen and Kerber (n 1); Evans and Padilla (n 4) 116–119; Hovenkamp (n 4) 318–323; Beckner III and Salop (n 1) 62–67; Tom and Pak (n 1) 391–400; Kaplow (n 3) 150–163, who refers to a varying complexity of rules rather than to the distinction between per se rules and the rule of reason as such; Ehrlich and Posner (n 2): even though the discussion concerns "specificity-generality continuum" (standards vs. rules), some elements (such as under- and over- inclusiveness) resemble per se/rule of reason discussion.

[6] Alan Devlin and Michael Jacobs, 'Antitrust Error' (2010) 52 William & Mary Law Review 75, 103.

[7] Tom and Pak (n 1) 394, 396.

standard.[8] To put it differently, one should take into account the probability and cost of error under a complex rule as compared to a simple one.[9]

Accordingly, one should seek for an "optimally differentiated rule", which avoids an open-ended investigation by limiting the scope of analysis, but at the same time is not overly superficial; it minimizes the sum of costs "on the average of all cases". Indeed, only a specific mixture of generality and detail may minimise the enforcement costs and efficiency losses.[10] Finally, the optimal differentiation depends on the regulated behaviour and thus varies from one behaviour to another.[11]

2.2. Trade-off between two risks – two components of accuracy.

When deciding between simple and complex rules, two issues must be taken into account. First, simple rules increase accuracy in the sense that the risk of their misapplication is lower: they require easily verifiable and not-prone-to-argumentation information, which makes their application relatively uncontroversial. However, there emerges a risk that such rules, although correctly applied, still lead to a mistaken consideration that a measure is or is not desirable – under- and over- inclusion are the price for the simplification. The risk of error is thus situated at the level of design of law.

In contrast, complex rules allow to account for individual circumstances of the case: the reasoning is based on case-specific facts and hints, which are interpreted altogether. This flexibility of assessment and looking at the broader picture may make similar measures be judged differently, identifying their pro- or anticompetitive characteristics with higher accuracy. Nevertheless, if the provided elements of assessment are incomplete or biased, accuracy may be impaired, leading to an erroneous outcome. In other words, the success of such an assessment is related to the availability of information and its quality. Moreover, by inherent vagueness of notions used in complex assessments, complex rules are considered to "compound the problem of error."[12] It may be said that the risk of error in this case refers not to the design, but to the process of execution of law, and this is why it will be called in this thesis "error in application."

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[8] Yannis Katsoulacos and David Ulph, 'Decision Errors, Legal Uncertainty and Welfare: A General Treatment' [2014] School of Economics & Finance Discussion Paper, no. 1408 1, 335.
[9] Evans and Padilla (n 4) 117.
[10] Phedon Nicolaides, 'Decentralised State Aid Control in an Enlarged European Union: Feasible, Necessary or Both?' (2003) 26 World Competition 269.
[11] Christiansen and Kerber (n 1).
[12] Devlin and Jacobs (n 6) 86–89.

One may use here the example of assessment of the incentive effect of aid. The first level, at which error may occur, relates to criteria whose fulfilment determines the existence of the incentive: here the distinction between formal and substantive incentive effect is operated. Whether the criteria laid down in guidelines allow to identify the incentive effect when it really is procured by aid is a matter of design of law, and the risk of over- and under-enforcement in such a case is therefore caused by ineffective rules. Error in application may intervene at a later stage, when the Commission applies these criteria to individual cases. If, for instance, it receives wrong information on the date of beginning of works on the project, it may erroneously recognise or eliminate the formal incentive effect. Another example is that of assessment of proportionality, where it is up to the design of law to decide on reliable thresholds and aid intensities, but error in application will consist in incompleteness of information or error in calculations. The more open-ended or vague the criterion, the more elements the Commission needs to gather and assess, and the higher the risk it errs at one point.

Hence, the advantage of complex rules consists in the fact that desirable measures may be distinguished from undesirable ones with higher accuracy, while the use of simple rules lowers the risk of error in application of law because simple rules are less vulnerable to informational problems. Therefore, under complex rules, the risk of error is borne at the occasion of each assessment, while under simple rules responsibility for error is transferred to the one-time process of establishing the rule. Ultimately, both risks bring the issue of over- and under-inclusion, because they result in Type 1 and Type 2 errors, except that their origin is different.

Consequently, if one wishes to lower the probability of decisional errors (increase accuracy in decision-making), one must balance advantages and disadvantages of each solution and decide on the characteristics of the optimal rule. Such 'perfect State aid criterion' for the assessment carried out by the Commission, once the measures targeted by the GER or *de minimis* rule are eliminated, must lie somewhere between an entirely simple and an entirely complex rule. Naturally, if all rules were simple, the 0 risk of error in application[13] would correspond to a high risk of error caused by unsuitability of the rule to some cases. Conversely, under all complex rules, the effect of 0 risk of error caused by the unsuitability would be compromised by a high risk of error in their application. Supposing that the risk of error in application has the

[13] Obviously, even under ideal circumstances, this value could not in fact be 0, since there always remain some inevitable errors, e.g. caused by clerical mistakes. These are, however, not taken into account in the present analysis.

same probability as the error caused by unsuitability of a rule, the balance would be struck half-way. Of course, this could only rarely be the case in practice. Therefore, it should be assessed how moving the rule on the complexity scale influences the *overall* risk of error, that is the error caused by misapplication of the rule *plus* the error caused by unsuitability of the rule to some cases.

The competition law literature does not seem to place both risks on an equal footing. Usually, authors assume that error costs are reduced with a higher differentiation of rules,[14] ignoring that differentiation raises the risk of errors in application, which are costly. Moreover, knowledge problems are presented only as one of the disadvantages of the rule of reason, alongside with impact on legal certainty or rent-seeking. Hence, error in application is not called an 'error' and does not seem to be considered as a component of accuracy. Nevertheless, such conceptual framework stands in opposition to the conclusions this chapter will be led to draw in the area of State aid law.

More specifically, increased complexity does not always lead to a decrease in the overall cost of error, especially when once one takes into account a high probability of error in application. Indeed, incorrect outcome – an error – is caused by any of the two issues, and the accuracy in decision-making depends on both. Even more, it is exactly the probability of error in application which may, with a view to ensuring a greater accuracy, lead to the preference for simple rules. Therefore, in the discussion on accuracy in state aid control, error in application will constitute a separate issue, a "fully-fledged" error, which will be a decisive factor in determining the optimal complexity of the assessment rule.

2.3. Conclusion

Accuracy in decision-making is strictly related to the determination of the optimal assessment rule, which allows to lower down the risk of decisional errors. The rules may go from very simple, whose application does not bring the risk of error but which may fail to identify beneficial or harmful effects of a measure, to complex rules, which more effectively distinguish between practices but are trickier in application. Based on that distinction, the optimal State aid assessment rule will be searched for in the remaining part of this chapter. Its content will first be analysed in light of the characteristics of the state aid procedure.

[14] Christiansen and Kerber (n 1) 224, 229.

3. The probability of error at different procedural stages

Following the observation, according to which the complexity of rules impacts the probability of error, in particular the risk of error in application, this section will underline differences between the two stages of State aid procedure. This exercise will demonstrate that each procedural phase pursues a different objective and provides different tools to achieve it, so that each phase should rely on rules that have a different degree of complexity. Consequently, there necessarily must exist at least two optimal assessment rules in State aid assessment.

3.1.Risk of error in application in the preliminary examination

Each procedural stage has a pre-defined function, clearly spelled out in the hard law and the case-law of the Court of Justice. The purpose of the preliminary examination is to enable the Commission to "form an initial view as to the partial or total compatibility of the aid in question with the market."[15] This objective openly diverges from the more ambitious aim of the formal investigation (the latter shall lead the Commission to become "fully informed of all the facts of the case"[16]) and is reflected in the design of this procedure.

3.1.1. The design of the preliminary examination and the risk of errors

The preliminary examination consists of an exclusive dialogue between the Commission and the State. The latter submits the notification and the former asks for additional information if it does not find it complete. Other actors have no rights, nor obligations, at this stage. As it was pointed out above, full reliance on information from the State may be pernicious due to two informational asymmetries: between the Commission and the State and between the State and market operators. Therefore, the Commission may potentially not obtain access to information needed to carry out assessment of the measure.[17]

In addition, the preliminary examination is designed to last no longer than 2 months,[18] although the time starts running only when a full notification is received. Moreover, pre-notification contacts, which become increasingly common, give the Commission a chance to have a glance

[15] C-646/11 P, *3F v Commission* (2013) ECLI:EU:C:2013:36, para 24.
[16] T-103/14, *Frucona Košice* (2016), ECLI:EU:T:2016:152, para 110; C-290/83, *Commission v France* (1985), ECLI:EU:C:1985:37, para 16.
[17] Francois-Charles Laprévote, 'A Missed Opportunity? State Aid Modernization and Effective Third Parties Rights in State Aid Proceedings' [2014] European State Aid Law Quarterly 426, 432.
[18] Council Regulation 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, OJ L 248, 24.9.2015, p. 9-29 (Procedural Regulation), Art. 4(5).

at the measure before an official notification is submitted. As a result, the preliminary examination often takes longer than the two months prescribed by the Regulation.

On the other hand, the two-month assessment period for one case overlaps with two-month periods for other cases: an agent is assigned to more than one case (according to data from 2011, on average to 7 cases as case handler and, additionally, to 7 cases as case assistant),[19] so he may not truly devote two months to one case. Moreover, this period includes not only pure examination of the case but also clerical steps, such as attribution of the case, communication with other units, drafting the text of the decision etc. Thus, the real time to handle the case is difficult to estimate but it must be shorter than two months.

Moreover, the duration of the procedure shall be read in conjunction with the informational asymmetries: a superficial assessment of complex criteria may lead to errors because Member States are players in repeated games, so that they learn how to provide applications prone to acceptation. It is unlikely that they submit obviously lacking or distorted information: throughout the years they observe the Commission work and thus skill in negotiating delicate matters. Hence, a two-month period may not be enough to discover inconsistencies and subtleties in the States' argumentation, especially since Phase 1 does not involve other actors, potentially better placed to spot an abuse.

The logic behind the preliminary examination is that the Commission may confidently conclude whether there exist lacunae in information provided by the State, which are able to raise doubts about the measure, and open a formal investigation whenever necessary. In such a case, the procedure indeed "merely... allow[s] the Commission to form a prima facie opinion on the partial or complete conformity of the aid in question":[20] the Commission decides only on absolutely straightforward cases and secures correct outcomes by using the second stage of the procedure. Importantly, this is how the lack of contradictory procedure at this stage is justified.[21] However, it seems that this result may only be guaranteed if the assessment is not overly complex, because tools dedicated to overcoming the informational asymmetries are limited.

[19] Court of Auditors, 'Special Report No 15/2011 – Do the Commission's Procedures Ensure Effective Management of State Aid Control?' (2011) 22.
[20] C-319/07, *3F* v *Commission* (2009) ECLI:EU:T:2012:164, para 30.
[21] Piet Jan Slot, 'EC Policy on State Aid Are the Procedures "User-Friendly"? The Rights of Third Parties', *Understanding State aid policy in the European Community : perspectives on rules and practice* (European Institute of Public Administration 1999) 91.

3.1.2. Interpretation of "serious doubts"

One solution to balance limited investigatory powers and low evidence requirements in application of complex rules could be to adopt a strict interpretation of the notion of 'doubts,' which constitutes the benchmark separating Phase 1 from the formal investigation. However, there appears to be some confusion as to how the existence of doubts should in fact be dealt with. This ambiguity leads to a higher risk of errors in state aid decisions.

Indeed, the Procedural Regulation prescribes opening of the formal investigation procedure when the Commission "finds that doubts are raised as to the compatibility."[22] Nevertheless, when carrying out assessment of actions for annulment, the Court uses the notion of 'serious difficulties', which must be demonstrated in order to consider that the Commission should have opened a formal investigation.[23] The same approach ('serious doubts') is followed in the Manual of Procedures.[24] Consequently, 'doubts' became 'serious doubts': the circle of 'eligible doubts' has been tightened.

Besides that, interpretation of 'serious doubts' remains unclear, which may be observed in the reticence of the General Court to annul decisions on this basis.[25] Indeed, even though the Manual of Procedures explicitly considers serious doubts to be proven by more than one request for information or 2-months period manifestly exceeded,[26] these elements are not considered by the Court as sufficient.[27] The Court has high expectations towards the applicants, ignoring the fact that access to the file is not guaranteed[28] while only the summary of Phase 1 decisions is published in the Official Journal.

Moreover, the Commission has been recognised to have a "certain margin of discretion in identifying and evaluating the circumstances of the case in order to determine whether or not they present serious difficulties", which reportedly does not impact its obligation to open a formal investigation once such difficulties arise.[29] Indeed, the Court explicitly refuses to the

[22] Procedural Regulation, Art. 4(4).
[23] E.g. T-289/03, *BUPA and Others* v *Commission* (2008) ECLI:EU:T:2008:29, para 328; T-210/02, *British Aggregates* v *Commission* (2006) ECLI:EU:T:2006:253, para 165; T-79/14, *Secop v Commission* (2016) ECLI:EU:T:2016:118, paras 25-27.
[24] Manual of Procedures, at 5.60 and 6.4.
[25] Out of 16 actions brought on this basis in the period 30th August 2008 – 28th March 2016, in 12 of them the applicants failed to demonstrate the existence of serious difficulties.
[26] Manual of Procedures, at 5.60.
[27] T-57/15, *Trajektna luka Split d.d. v Commission* (2016) ECLI:EU:T:2016:470, paras 64-75 ; T-58/13, *Club Hotel Loutraki AE and Others* (2015) ECLI:EU:T:2015:1, paras 45-63.
[28] John Temple Lang, 'EU State Aid Rules - The Need for Substantive Reform' [2014] European State Aid Law Quarterly 440, 453.
[29] T-375/04, *Scheucher-Fleisch* (2009) ECLI:EU:T:2009:445, para 73; T-304/08, *Smurfit Kappa Group* (2012) ECLI:EU:T:2012:351, para 75.

Commission the discretion in opening the formal investigation.[30] However, this reasoning seems contradictory inasmuch as discretion in deciding about serious doubts in fact allows the Commission to decide when to open a Phase 2 procedure, thus undermining this obligation. The unclear standard of assessment of "serious doubts" together with the Commission's margin of discretion favour the non-opening of formal investigations.

As a consequence, the Commission may fail to open a formal investigation procedure and approve a harmful measure. It may consider itself sufficiently enlightened on all relevant points or consider doubts to be insufficiently serious. Potentially, the situation might be reversed: it may open a formal investigation even though a measure does not raise any concerns. However, in such a case the doubts may be removed in the course of Phase 2 so that the final decision is not erroneous.[31] On the contrary, ignoring doubts in the preliminary examination may directly result in an erroneous positive decision.

3.1.3. Conclusion on the preliminary examination

The design of the preliminary examination reveals that it creates a high risk of error whenever a complex assessment would have to be made. Indeed, full reliance on the notifying State, the duration of the assessment and the loose interpretation of the notion of "serious doubts" all contribute to the fact that informational asymmetries may be overcome only to a limited extent. These characteristics will be reflected in the discussion on the optimal assessment rule Section 5. Before that, conclusions on the preliminary examination shall be contrasted with the probability of error under the formal investigation procedure.

3.2.Risk of error in application in the formal investigation

Compared to the preliminary examination, the formal investigation offers to the Commission better tools to lead it towards complete and truthful information despite information asymmetries, and therefore, to more confidently apply sophisticated rules. The pre-requisites for a profound inquiry into circumstances of individual cases correspond to the purpose of the

[30] E.g. "doubts [as to the compatibility of the aid] must trigger the initiation of a formal investigation procedure", T-123/09, *Ryanair v Commission* (2012) ECLI:EU:T:2012:164, para 63; "the Commission is obliged to initiate that procedure if an initial review does not enable it objectively to overcome all the difficulties encountered when assessing [the measure], without having any discretion in that regard," T-57/15, *Trajektna luka Split* (2016) ECLI:EU:T:2016:470, paras 58-59.

[31] On the other hand, the disadvantage lies in the cost of an unnecessarily opened formal investigation.

formal investigation, namely to make the Commission "fully informed of all the facts of the case."[32]

3.2.1. Submission of comments

Comments submitted by interested parties evidently are for the Commission a precious source of information, especially when they are numerous or extensive.[33] However, according to the Commission, the voluntary character of this intervention implies that in some cases, no comments will be submitted: in fact, it happens that none of the interested parties react to the opening of a formal investigation.[34]

One reason for which no comments are submitted may be that there simply is no additional information the Commission could be provided, so that lack of comments might at times argue in favour of the measure. Nevertheless, other reasons have to be considered: interested parties may be unconscious of this possibility, because they do not closely follow publications in the Official Journal or simply do not know they dispose of such right; they may find the one-month period for submission of comments insufficient; they may be unfamiliar with state aid law to the extent allowing to enter into the discussion on the measure. Therefore, and in light of the considerations on informational asymmetries, lack of comments may, in general, be considered as a negative phenomenon.

However, in practice submission of comments is not as rare as the Commission suggests in its Manual of Procedures – for instance, out of 12 cases involving application of environmental guidelines, the Commission received comments from parties other than beneficiaries in 8 of them.[35] In the majority of cases, comments were mixed and included both positive and negative feedback on the proposed measures. It is difficult to evaluate to what extent these comments

[32] T-103/14, *Frucona Košice* (2016), ECLI:EU:T:2016:152, para 110; C-290/83, *Commission v France* (1985), ECLI:EU:C:1985:37, para 16.

[33] E.g. *Alstom* or *Charleroi Airport* cases, in: Leigh Hancher, Tom Ottervanger and Piet Jan Slot, *EU State Aids* (Sweet & Maxwell 2016) 25–031.

[34] "It is not uncommon that no interested party reacts to the opening of the procedure": Manual of Procedures, at 6.47.

[35] Out of all 12 decisions adopted in the reference period, the following 8 mention the participation of third parties: Commission decision 2016/288 of 27 March 2015; Commission decision 2015/1585 of 25 November 2014; Commission decision of 15 December 2009 in State aid case n° C 5/2009; Commission decision 2017/1494 of 19 December 2016; Commission decision 2017/503 of 8 November 2016; Commission decision 2017/1436 of 1 December 2015; Commission decision 2015/1585 of 25 November 2014; Commission decision 2015/1583 of 4 August 2014; Commission decision on State Aid SA.18042 of 9 July 2014; Commission decision on State aid SA.18832 of 11 June 2014**;** Commission decision on State aid SA.33412 of 17 July 2013; Commission decision in State aid case C 43/02 of 28 January 2009.

influenced the Commission's final decisions, but they certainly allowed to verify some of the States' arguments.

For instance in the formal investigation on State aid SA.38762, the Commission received 30 comments from concerned stakeholders, such as trade organisations, Members of the UK Parliament, non-governmental organisations, companies, industry associations and even a U.S. and Canadian competitors. The latter analysed the pattern of exports and provided a very detailed overview of product output and its prices in the U.S. and in Europe as well as their variations over time. The comments were based on reports and theoretical studies carried out by external experts, and aimed to demonstrate that aid may cause distortions of competition even on the North American market. Other companies submitted, in Commission's words, "technical arguments stressing the soundness and the positive impact of the project, " covering topics such as the project IRR, the availability and sustainability of biomass, the role of biomass energy in reaching the United Kingdom renewable targets, the plant's expected operating parameters and the logistic of the fuel supply. In response to these comments, the UK provided additional information on the operating parameters of the power plant concerned and even claimed that the economics of the project changed considerably since the notification.[36] This case is an interesting example of the formal investigation as a forum on which various market operators and experts may express technical opinions and present hands-on arguments in favour or against the project. This case demonstrates also that market operators may be more competent and inclined to provide hard evidence instead of vague argumentation than the notifying Member State could be at the beginning of the procedure. Therefore, while comments certainly are not submitted in every case, and whenever they are provided, they may constitute an invaluable source of information, leading to a more informed and more accurate decision.

3.2.2. Requests for information

Apart from voluntarily submitted comments, the Commission may rely on requests for information. It is essential to observe that market information tools were introduced by 2015 Procedural Regulation specifically in order to improve the quality of information gathering in the formal investigation.[37] Indeed, requests for information allow to address both unwillingness of the State to cooperate and its objective inability to gather necessary market information.[38]

[36] E.g. Commission decision 2017/1436 of 1 December 2015, paras 33-52.
[37] Conor Quigley, 'The European Commission's Programme for State Aid Modernization' (2013) 20 Maastricht Journal of European and Comparative Law 47.
[38] Vittorio Di Bucci, 'The Modernisation of State Aid Control and Its Objectives: Clarity, Relevance, Effectiveness' (2014) 2014 Italian Antitrust Review 20–21.

It is interesting to observe that the State must agree for a request to be addressed to the beneficiary of aid, which certainly weakens the potential of exchange with that actor. On the other hand, the strength of requests for information is significantly reinforced by the fact that fines may be imposed on undertakings.[39] Fines deter from providing incomplete or false information, especially when dishonest actors expect other interveners to provide information they wish to hide or denature.

This observation does not apply to Member States, both the notifying one and others, as fines are not foreseen for them. Obviously, a reminder is much less powerful than a threat of a fine. However, it was predictable that the States would not agree to adopt a regulation imposing fines on themselves; besides, it could be problematic to find a right amount of fine, applicable to all Member States.

In any case, considerations on requests for information remain mainly theoretical since this investigatory power has for now been a dead letter of the Procedural Regulation, as the Commission does not address requests to sources other than the notifying State.[40] Moreover, although sanctions were supposed to increase the quality of information while requests to companies could allow the Commission to cross-check the information,[41] none of these results may be achieved, as neither sanctions nor requests for information are ever used by the Commission. On the Commission's side, the procedure still seems to involve mainly the dialogue with the State, so that the potential of the formal investigation is not fully exploited.

3.2.3. Missing investigatory powers

Despite the existence of investigation tools unavailable in the preliminary examination, in the formal investigation the Commission lacks several powers it enjoys in other fields of competition law. These missing powers were identified in the preceding chapter, but some of them will be further discussed below.

A straightforward limit of the State aid investigation may be the lack of the general obligation to delineate the relevant market, which may hamper a truthful assessment of the existence of a

[39] Thomas Jaeger, 'The Inquisition Retakes Brussels (Via the New Procedural Regulation)' (2013) 12 European State Aid Law Quarterly 441; Laprévote (n 17) 436–438; Hanns Peter Nehl, '2013 Reform of EU State Aid Procedures: How to Exacerbate the Imbalance between Efficiency and Individual Protection' (2014) 13 European State Aid Law Quarterly 235.

[40] An exception here are the Commission's recent investigations on illegal aid granted through tax rulings, in which it addressed requests for information to many different Member States.

[41] Quigley (n 37) 51.

market failure as well as that of negative effects of aid, namely of distortions on the market. Such information could be provided by the Member State itself, could be carried out by the Commission just like it does in other competition cases, or could be provided by market operators in Phase 2. Delineation of the market would allow the Commission to gain and verify exactitude of the relevant information, difficult to obtain otherwise. Additionally, it could allow to avoid some requests for information, act as a 'check' for the information provided, be a deterrent from submitting incomplete information, and make the Commission aware of particular pieces of information it needs to keep investigating. Even a modest but independent investigation (for instance, revising the results of market inquiries in similar competition cases) might contribute to increased accuracy.

As for now, delineation of the relevant market is not foreseen in State aid assessment.[42] In addition, the most recent versions of some guidelines, e.g. Regional Aid Guidelines, removed the previously existing element of market definition. This removal could have been motivated by the aim to align assessment under RAG with assessment in other sectors, where the relevant market is not identified. However, t is not clear why the Commission resigns from market delineation and why it does not consider it helpful (or what other reasons lead it to such removal, e.g. whether it considers such tool to be too costly, or impractical, or replaceable). In particular, the guidelines kept references to the relevant market, e.g. the relevant market may be in decline, which may increase the negative effects of aid,[43] a restructuring plan shall take account of future prospects of supply and demand on the relevant product market,[44] and it is directly related to distorting dynamic incentives and crowding-out effect.[45] It is reasonable to expect that delineation of the relevant market would be more useful in some areas than in others, but it is difficult to argue that it would bring no added value to accuracy in assessment, in particular, of negative effects of aid as well as existence of a market failure.

Among possible improvements to State aid procedure, it was also suggested that an Advisory Committee with functions similar to its antitrust/merger counterpart could "improve the thoroughness and the intellectual content" of the assessment.[46] Consultation could potentially contribute to spot errors so as to decrease the risk and number of errors. However, the danger

[42] An exception is the RDI Framework as well as *Guidelines for the examination of* individual *State aid to the fishery and aquaculture sector, OJ C 217, 2.7.2015.*
[43] RAG, para 135.
[44] RR guidelines, para 50.
[45] RDI framework, para 99.
[46] Lang (n 28) 450–451.

brought by a body composed of national experts consists in the possibility it would be biased: Member States could tend to approve measures in order to adopt similar measures in the future. Since participation of the notifying State in the procedure is already very strong while the procedural rules favour adoption of positive decisions, it is doubtful whether establishment of such Committee would in fact be beneficial.

Limits to the Commission's investigative powers are relevant especially in the context of introducing economic assessment in state aid control, whose success depends on the necessary data.[47] However, and despite the shortcomings, the formal investigation procedure certainly offers more possibilities to gather information, and thus to adopt a correct decision, than the preliminary examination.

3.2.4. The practice of Phase 2 decisions – more time, more accuracy

The mission and character of the formal investigation are further expressed in its duration. Indeed, while one problem of the preliminary examination lies in its limited time, the formal investigation may last up to 18 months, which add to the time previously spent on assessment in the preliminary examination. Such length allows the Commission to carefully examine received information, confront it with its own considerations and potential comments from interested parties. Without attempting to judge the outcome of individual decisions, Phase 2 decisions are significantly longer than Phase 1 ones and fuller of content; the Commission is more critical about information it obtains and seems to care much more about quality of the State's statements and evidence the latter provides.

The above is not to say that all Commission's Phase 2 decisions are accurate: as mentioned above, the Commission still bases its assessment mainly on the information provided by the State. However, longer duration and comments submitted by third parties allow to get significantly closer to the 'truth' and create room for more complex assessments, so that the same complex rule could be applied with more accuracy in Phase 2 than in Phase 1.

3.3. Separate procedures requiring separate assessment criteria

The above-described specificities of each procedural stage and their different propensity to error shall lead one to be more understanding and respectful of the existing structure of State aid

[47] Kelyn Bacon, *European Community Law of State Aid* (Oxford University Press 2009) 1.40.

assessment. Indeed, if each phase has distinct characteristics that make it more or less prone to error, it is because they each pursue a distinct objective. The preliminary examination serves the purpose of identifying clearly unproblematic measures, and therefore is limited to an initial view on the measure. Its design is thus perfectly justifiable in light of its modest aim to identify straightforward, unproblematic measures.

In contrast, the formal investigation, which constitutes an in-depth assessment of the case, is reserved for measures that present doubts, and for this purpose foresees a much broader range of investigatory tools as well as longer duration of assessment.

This gives us the picture of two State aid procedures, out of which there is no reason that one should be more prone to errors than another. Indeed, approving straightforward measures through a short procedure is a value separate from that of approving or prohibiting complex measures in an in-depth assessment. The Commission shall, first, form an accurate initial view and then, carry out an accurate in-depth assessment – it is difficult to assign any other intention to the Commission and Member States when the distinction between two stages was decided. In such a case, a well-designed law shall guarantee the balance between the objective, resources and scope of assessment, so that no procedure is initially condemned to error, and so that accuracy of one procedure is not sacrificed to increase accuracy of a different one.

Therefore, it is logical to assume that the different objectives, reflected in the procedural design, justify different scopes of the assessments. The optimal assessment rule may not be shared by the two procedural stages. More specifically, if a rule is not well-suited for a given procedure, the Commission may not be able to overcome the informational asymmetries in order to achieve the procedure's objective. As an illustration, the Commission shall form an initial view in order to establish whether a measure does not raise doubts as to its conformity with State aid law, but at the same time it exchanges information solely with the Member State, which brings the risk of Type 2 errors. In this case, the assessment rule must prevent the risk of adopting an erroneous positive decision and it may be that a complex rule does not lie in the interest of this assessment. On the other hand, the formal investigation allows to better address informational asymmetries, so that the assessment rule does not have to focus mainly on preventing that risk. It is clear that if a complex rule requires a lot of resources, then the formal investigation will apply it more accurately than the preliminary examination.

3.4. Conclusion

The two procedural stages have different characteristics, which may be directly related to the risk of error when applying State aid law. This risk seems to be higher in the preliminary

examination and lower in the formal investigation. However, this propensity to error does, in fact, reflect the mission conferred upon the Commission at each procedural stage: forming an initial view as opposed to an in-depth assessment. Consequently, one shall opt for a solution where the different function of each phase is fulfilled with the same accuracy.

This may be accomplished by adapting the level of complexity of the assessment rule applied at each stage. Therefore, the next question is that of how complex State aid assessment criteria are and how this degree of complexity sits with the optimal complexity for each procedural phase.

4. Complexity of State aid assessment – criteria of assessment of measures

This chapter approached two issues until now. First, it explained the relationship between the choice of the optimal complexity of the assessment rule and the probability of error, pointing out that complex rules bring more effective distinction between measures but higher risk of error in their application. Second, it concluded that the optimal rule in the preliminary examination must have lower complexity than the optimal rule for the formal investigation, due to their different objectives and design. This section will investigate complexity of different State aid assessment criteria in order to further compare them to the optimal complexity for each procedural stage, conclude on the probability of error and suggest improvements.

4.1. The scope of analysis

The broad scope of the assessment carried out by the Commission, which consists, first, in qualification of a measure as aid under Article 107(1) and second, in a compatibility assessment in line with Article 107(2) and (3), poses a practical problem for the present analysis. Indeed, the number of criteria makes the analysis of complexity of all of them burdensome and at the same time superfluous. More specifically, this section aims to draw a general picture of complexity of criteria and illustrate different degrees of complexity. This analysis will be useful to evaluate, in the next sections, whether the assessment rule is optimal for State aid procedure, in particular whether accuracy in assessing those criteria may be guaranteed in the preliminary examination.

Hence, the present section will focus on the compatibility assessment of aid, which is decisive for the future of around 98% of measures, and which lies entirely in the hands of the Commission, as opposed to the notion of aid that is interpreted by the Court of Justice.

Furthermore, the analysis will cover measures falling within the scope of four acts of soft law,[48] which regulate: aid for restructuring (RR guidelines),[49] aid for regional development (RAG),[50] environmental aid (EEAG),[51] and aid for research, development and innovation (RDI Framework).[52] The last three are the most popular types of aid[53] while RR guidelines are interesting for the specificity of some criteria as compared to their counterparts in other guidelines.

The judgment over how to qualify a given criterion is based on the wording of guidelines as well as on Commission's decisions, from which it often stems whether an assessment is based on objective elements or involves open-ended, case-specific considerations. The difference may also be observed in the language of the Commission, which asserts either that a State "provided evidence" or "demonstrated" that a criterion is fulfilled or it only "submitted a number of arguments" in relation to others.[54] Nevertheless, as simplicity may not be measured, any conclusion must necessarily remain subjective and based on intuition. Moreover, even technical notions could potentially be subject to interpretation and could bear an element of uncertainty, while subjective criteria recur sometimes to calculation-based elements as part of assessment.[55] Thus, at times polarisation between the simple and the complex may seem to constitute simplification; it is, however, satisfactory in order to make the point targeted in this chapter.

4.2.Simple and complex criteria used by guidelines

Each act of soft law lays down a list of criteria to be followed in a State aid assessment. All guidelines follow the same logic: the focus is first placed on aid's positive effects, then on negative ones, and finally on balancing of these effects (the latter is not always explicitly carried out). An analysis structured this way shall ensure that only aid whose negative effects are outweighed by benefits is approved. Within each 'block,' guidelines provide for individual criteria of assessment. Hence, the attributes the aid shall have include contribution to an

[48] Hereinafter referred to, generally, as "guidelines" or "acts of soft law."
[49] Communication from the Commission — Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, OJ C 249, 31.7.2014, p. 1–28.
[50] Guidelines on regional State aid for 2014-2020, OJ C 209, 23.7.2013, p. 1–45.
[51] Communication from the Commission — Guidelines on State aid for environmental protection and energy 2014-2020, OJ C 200, 28.6.2014, p. 1–55.
[52] Communication from the Commission — Framework for State aid for research and development and innovation, OJ C 198, 27.6.2014, p. 1–29.
[53] State Aid Scoreboard, available at: http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html .
[54] Especially in the cases assessed on the basis of RDI Framework.
[55] For instance, RAG requires the investment to be maintained in the area concerned for at least five years, as well as a 25% own contribution, within the framework of the assessment of the contribution to an objective of common interest.

objective of common interest, necessity, proportionality, appropriateness and the incentive effect of aid, which apply to all types of aid. Assessment of the negative effects covers specific distortive effects of aid, whose number and content vary from one act to another.

Using the antitrust vocabulary, one may claim that State aid assessment embodies the "structured rule of reason", because it limits an open-ended analysis by laying down a list of criteria to be taken into account.[56] However, also individual criteria and sub-criteria present varying degrees of complexity, expressed in the level of detail in their definition and the effort necessary to apply them.

4.2.1. Simple criteria of assessment

It turns out to be easier to identify complex than simple assessment criteria. However, good representatives of the latter group are the proportionality test as laid down in the RAG, EEAG and RDI Framework, as well as several notions used in the RR guidelines.

A) Proportionality test under the RAG, EEAG and RDI Framework[57]

Aid is proportional when its amount is limited to the minimum needed to induce the additional investment or activity in the area concerned. Deciding on proportionality involves, first, verification of the aid intensity, which is closely related to eligible costs of the project. The latter information is obtained through selection, out of the costs of the project, those specifically indicated in guidelines. Some percentage of such eligible costs, also fixed in guidelines, corresponds to the maximum amount of aid.

Proportionality in itself is a very complex issue, inasmuch as it must be assessed what amount of aid would ensure the activity to happen, without however providing an unnecessary advantage to the beneficiary. Certainly, that judgment is not straightforward, especially when it is made in abstract for an entire group of similar measures.[58] However, a difference must be made between the design of substantive law on the one hand, at the level of which the choices and complex assessments are made, and the subsequent application of those choices to

[56] Christiansen and Kerber (n 1) 221; Tom and Pak (n 1); Beckner III and Salop (n 1) 67–70; Thomas C Arthur, 'A Workable Rule of Reason: A Less Ambitious Antitrust Role for the Federal Courts' (2010) 68 Antitrust Law Journal 337.
[57] RAG, paras 77-112; RDI Framework, paras 72-93; EEAG, paras 69-87.
[58] David Spector, 'State Aids: Economic Analysis and Practice in the European Union', *Competition policy in the EU : fifty years on from the Treaty of Rome* (Oxford University Press 2009) 192.

individual cases on the other hand or, in other words, what an agent needs to do to assess proportionality. While the former does not lie in the interest of this thesis, the latter comes down to the simple application of pre-defined thresholds to the case at hand.[59] To put it differently, defining proportionality is certainly one of the essential and most complex challenges of State aid substantive law (what should be the intensities and eligible costs?), but compliance with this requirement is established following a purely mathematical exercise (what percentage of eligible costs does the aid represent?).

Second, the guidelines provide an obligation of non-cumulation of aid: aid awarded under several aid schemes or cumulated with ad hoc aid must not exceed the maximum intensity. Again, such finding is based on calculations and remains relatively uncontroversial in application. Naturally, the risk emerges that some measures may erroneously not be considered as State aid and therefore, may be omitted in calculations. However, this is a problem of interpreting and applying the notion of aid by Member States rather than the problem of complexity of the non-cumulation rule itself.

Another element of the proportionality assessment, common for the three types of aid,[60] is the "net-extra cost approach", i.e. limiting the aid to net extra costs of aided investment when compared to counterfactual scenario, in which the beneficiary carries out an alternative project.[61] In the case where such a project would not take place, the Commission examines whether the aid does not exceed what is necessary to render the project sufficiently profitable, by excessively increasing the internal rate of return (IRR) or the hurdle rate. This is another technical exercise, which makes the proportionality test a relatively simple criterion, limiting the room for manipulation and distortion of facts.

One may observe in Commission's decisions that proportionality is the most accountability-like element of assessment, which relies entirely on calculations based on information provided by the State. For instance in case on aid SA.39078, the Commission needed only to calculate the funding gap as the discounted difference between the positive and negative cash flows over the lifetime of the investment. The Commission then calculated what percentage of the eligible

[59] Hans W Friederiszick, Lars-Hendrik Roller and Vincent Verouden, 'European State Aid Control: An Economic Framework', *Handbook of Antitrust Economics* (MIT Press 2007) 658.
[60] Applicable only to individual aid under RDI Framework and EEAG.
[61] RAG, para 78.

costs the aid amounted to, and concluded that the aid intensity obtained was below the funding gap ratio. Since the loans concerned were limited in scope and time, aid was considered to be proportional.[62] In a case on environmental aid SA.35179, the Commission based its brief proportionality analysis on the levelized costs of the electricity produced (LCOE) and IRR.[63] As regards operating aid, the Commission recognises proportionality if the aid is granted only to the extent of actually incurred operating losses.[64] Finally, when the Commission casts doubts as to proportionality, it does so due to the lack of reliable data, e.g. in case on aid SA.43260, where there was "no visible link between the amounts paid and the basis of the marketing agreements and the airport charges" as well as "the agreements were negotiated bilaterally, without any transparency."[65]

B) A firm in difficulty under the RR guidelines

The RR guidelines provide for another example of simple assessment: qualification of the beneficiary as a firm in difficulty.[66] Indeed, a firm must have either lost more than half of its capital as a result of accumulated losses, be subject to collective insolvency proceedings (or fulfil the criteria under its domestic law for being placed in such a proceedings) or have a certain book debt to equity ratio and EBITDA interest coverage ratio. Such information is easy to demonstrate and, once the evidence provided, hardly questionable, as it usually refers to the financial documentation of the beneficiary.[67]

4.2.2. Complex/vague criteria of assessment

Complex State aid criteria are those whose assessment involves an inquiry into subjective and individual circumstances, and thus requires many pieces of information, or "hints". For the purpose of this chapter, one may sometimes perceive complexity as vagueness in that the criteria are very broadly and generally defined, which in State aid law creates the risk of overinclusion. The risk of error in their application stems from the fact that a criterion is not clearly defined or is defined by terms that themselves are imprecise, and that the open-endedness results in a broad margin of discretion, which may be abused.[68] Such a situation is

[62] Commission Decision of 23 July 2015 on SA.39078, paras 106-111.
[63] Commission Decision of 26 September 2019 on SA.35179, paras 71-75.
[64] Commission Decision of 26 October 2018 on SA.43260, para 320.
[65] ibid, paras 353, 363.
[66] Although technically, this assessment takes place before the compatibility assessment, it may be used as an example here, especially that in the Commission's decisions, it is often not kept apart from the compatibility test.
[67] E.g. Commission Decision 2015/494 of 9 July 2014, para 113; Commission Decision 2016/289 of 8 June 2015, paras 94 and 160, where it is additionally underlined that the data was verified by independent auditors.
[68] Christiansen and Kerber (n 1) 233–235.

illustrated by the notions of objective of common interest, necessity and appropriateness, as well as by the criterion of negative effects of aid on the market.

A) Contribution to an objective of common interest, necessity and appropriateness

Contribution to an objective of common interest is an open-ended criterion, leaving space for a lot of imagination by the notifying State. According to the definition laid down in all analysed guidelines, this criterion means that "a State aid measure must aim at an objective of common interest in accordance with Article 107(3) of the Treaty." Guidelines further indicate the general objectives of different types of measures, namely "to reduce the development gap between the different regions," "the promotion of RDI in the Union," "to increase the level of environmental protection."[69] However, there is no closed catalogue of objectives of common interest and the latter are, by their nature, general and large in scope.[70] Consequently, demonstrating this criterion is a matter of good presentation: it is almost always possible to associate aid to some objective of common interest, while the contribution is recognised as long as the State can associate aid to some goal in line with EU policy.[71]

On the other hand, a certain willingness to make this criterion more concrete may be noticed in the RDI Framework (an increased level of RDI activities may be demonstrated by increase in project's size, scope, speed or total amount spent),[72] and in the EEAG (in case of individual aid, a reference may be made to quantifiable elements, such as reduction of pollution).[73] In the same vein, when notifying regional aid, Member States often invoke creation of direct or indirect jobs, which are explicitly mentioned by the RAG.[74] In those cases, contribution to an objective of common interest is much more intelligible, even though it is not yet a standard and the Commission, as mentioned above, adopts a loose approach by accepting this criterion in virtually all cases.

Similarly, necessity, appropriateness and, in the RR guidelines, incentive effect of aid, are highly imprecise and even more unclear in application. There are no concrete arguments that should be advanced nor any particular reasoning to be followed by the Commission or the State.

[69] Respectively, paras 30 of RAG, para 42 of the RDI Framework and para 30 of EEAG.
[70] These may be the general objectives of the European Union or more specific objectives laid down in various documents, such as Europe 2020 strategy.
[71] As observed when pointing at the unusual non-recognition of this objective in the Commission decision 2017/70 on Spanish aid for high-speed trains: Phedon Nicolaides, *State Aid for R&D: What Is Research?,* StateAidHub.eu by lexxion, (2017), available at: http://stateaidhub.eu/blogs/stateaiduncovered/post/8195 .
[72] RDI Framework, para 46.
[73] EEAG, para 33.
[74] RAG, para 40 (a) and (b).

The analysis is mainly based on factual and legal circumstances freely provided by the State, the latter describing the context and trying to convince the Commission that the criteria are fulfilled. Ultimately, whether or not necessity and appropriateness will be recognised depends on how the case is presented by the State and how well it will argue in favour of the measure.[75] Although questions related to the existence of a market failure or the possibility to recur to other instruments are fundamental for the finding of whether the market operates efficiently without aid,[76] they are neither explored by the States nor investigated by the Commission.

B) Negative effects of aid

An final example of a complex State aid assessment is the analysis of negative effects the aid has on competition. This is, intuitively, an area where the reasoning is based on various and case-specific elements. In the RDI Framework and EEAG, the scope of examination is relatively broad and the assessment is divided into several hint-based parts.

According to the RDI framework,[77] which as it was mentioned constitutes an exception on that point, the Commission first delineates the relevant product and geographic market. Then, it verifies whether the measure distorts competitive entry and exit processes, has crowding out effect and leads to the creation or maintenance of the market power.

In cases of individual aid, the guidelines indicate the elements taken into account in the assessment of the crowding out effect: market growth, the amount of aid, open selection process and other. However, they contain rather general observations, such as "the more the market is expected to grow in the future, the less likely that the competitors' incentives will be negatively affected by the aid".[78] Vagueness concerns also criteria such as closeness of the concerned activities to the market, incentives to compete for the future market or even the level of entry or exit barriers.[79] Moreover, the guidelines use notions, which by their nature may be interpreted differently and do not favour clarity in decision-making: "ample opportunities", "significant amounts", "projects of a similar kind", "high barriers", "product innovation rather about developing differentiated products". Finally, some of them require drawing hypotheses, which

[75] EEAG foresee special arrangements for specific types of aid, which point in two directions: some simplify the assessment by laying down presumptions, other introduce additional elements to the assessment.
[76] Vincent Verouden, 'EU State Aid Control: The Quest for Effectiveness' (2015) 14 European State Aid Law Quarterly 459, 460.
[77] RDI Framework, para 94-118.
[78] RDI Framework, para 112.
[79] Commission Decision of 20 November 2013 on State Aid SA.35092, para 172; Commission Decision of 27 March 2014 on State Aid SA.37131, para 206.

appear to be very speculative even for an *ex ante* assessment, e.g. whether the advantage "reduces [competitors'] possibility to potentially successfully enter th[e] future market".

Turning next to the market power of the aid recipients, the guidelines establish a threshold of 25% of market share that implies a deeper analysis. To conclude on the market share is a relatively complex exercise as it requires to identify such characteristics of the market as its structure, level of entry barriers, buyer power and selection process.[80]

Finally, it is examined whether the aid influences the choice of location and whether it has manifest negative effects; in practice, the latter assessment is omitted by the Commission in its decisions on individual aid.[81] Both criteria may be judged as quite open-ended, e.g. an aid may have a manifest negative effect by being 'discriminatory to an extent not justified by its state aid character,' and it is not clear how to assess the influence on the choice of location as distorting competition.

Examination of undue distortive effects under the EEAG also involves complex considerations.[82] The assessment is based on a description of the market situation: even though it could rely on hard data, it usually comes down to an open discussion on the circumstances of the case. Regardless of the precise assessment criteria for individual aid laid down in the guidelines, in its decisions the Commission does not refer to these specific elements but analyses the effects of the measure in a general way. In contrast, the EEAG introduces a presumption, according to which whenever an aid is proportionate and does not purely lead to a relocation of the activity without an environmental effect, it has no manifest negative effects.[83] Naturally, such a presumption largely simplifies the complex assessment of distortive effects.

4.2.3. From complex to simple: the incentive effect and balancing test according to RAG.

Although some criteria clearly appear to lie on the simple or on the complex side, qualification of some types of information required for assessment is not obvious. Indeed, some criteria may seem intrinsically complex while in fact, they turn out to be relatively simple, as they are

[80] RDI Framework, para 114.
[81] According to the guidelines, the criteria for assessment of individual aid are "additional" and do not replace the general criteria. However, the Commission happens to entirely omit the assessment of manifest negative effects in its decisions on individual aid.
[82] EEAG, paras 88-103.
[83] EEAG, paras 94-96, as well as in Commission decisions, e.g. Decision 2017/1436 of 1 December 2015, para 86.

interpreted in a uniform and unequivocal manner, based on uncontroversial information. An illustration is provided by the notion of incentive effect as well as the analysis of aid's distortive effects and the balancing test according to the RAG, which are considered as "cornerstones of the refined economic analysis."[84]

A) Incentive effect

According to the basic definition of the incentive effect, "the aid must change the behaviour of the undertaking(s) concerned in such a way that it engages in additional activity which it would not carry out without the aid or it would carry out in a restricted or different manner or location".[85] This originally imprecise characteristic of aid is now "established on an objective basis",[86] by differentiating between formal and substantive incentive effect.[87]

Under the formal incentive effect, "works on an investment can start only after submitting the application form for aid," which constitutes a rather unambiguous criterion and it does not seem to constitute an issue in the Commission's decisions. The substantive incentive effect, which pertains only to individual aid, requires from the State a "clear evidence that the aid effectively has an impact on the investment choice or the location choice" (respectively scenario 1 and scenario 2).

As suggested further in the guidelines, a Member State may use methodologies such as net present value of the project, the IRR or the average return on capital employed. Such information is to be demonstrated by reference to official "board documents, risk assessments..., financial reports, internal business plans, expert opinions and other studies". Even though the incentive effect might be demonstrated in a different way, the States usually use calculations and refer to internal documents or the decision-making process of the beneficiary.

The formal and substantive incentive effect have also been introduced in the RDI Framework and EEAG.[88] Some specific elements of assessment differ from the RAG, but in practice, they are also mainly calculation-based and derived from financial hints. This practice of the States brings the open-ended concept of incentivisation to a simple assessment of financial data,[89]

[84] Kristyna Deiberova and Harold Nyssens, 'The New General Block Exemption Regulation (GBER): What Changed' (2009) 8 European State Aid Law Quarterly 31.
[85] RAG, 26(d), an almost identical definition is adopted in EEAG, para 27(d) and RDI Framework, para 36(d).
[86] RDI Framework, para 69.
[87] RAG, paras 60-76.
[88] RDI Framework, paras 62-71 and EEAG, paras 49-68, the latter envisaging only scenario 1.
[89] Lowri The incentive effect, as "developed in the most refined manner", was described in: Evans and Harold Nyssens, 'Economics in State Aid: Soon as Routine as Dentistry?', *Competition law and economics: advances in competition policy enforcement in the EU and North America* (Edward Elgar 2010).

which is related to lower enforcement costs and, as it will be argued in detail below, may contribute to higher quality in Phase 1.

B) Negative effects of aid according to the RAG

A similar, surprisingly simple, character is found in the 'checklists' replacing the complex assessment of distortive effects under the RAG. In the previous section, it was indicated that evaluation of aid's negative effects on the basis of the acts of soft law is a rather complex exercise. On the contrary, the RAG's criteria do not envisage looking into the circumstances of the particular case, but foresee a limited number of criteria, which are clearly defined and do not leave room for interpretation.

In its decisions applying the RAG, the Commission estimates aid's distortive effects by appreciating four well-defined criteria, called 'manifest negative effects'.[90] In practice, it applies only three criteria, depending on whether the aid falls under Scenario 1 (covering investment decisions) or Scenario 2 (location decisions), which are defined in the RAG. Three out of the four criteria are rather simple: 1) whether the aid exceeds the maximum intensity ceiling, 2) whether the market concerned is structurally in absolute decline, which is based on the market's growth rate and which occurs rarely (Scenario 1), and 3) whether the investment could have been located in a region with a higher regional aid intensity (the Scenario 2 counter-cohesion effect). The final manifest negative effect is that the beneficiary closes down the same or a similar activity in another EEA area and relocates that activity to the target area. This criterion could potentially be subject to argumentation by the State but the room for manoeuvre is limited, as relocation refers to a verifiable fact.

C) Balancing test according to the RAG

Following the simplified assessment of aid's distortive effects, also the balancing test may be qualified as simple. Actually, the Commission's decisional practice shows that there virtually is no balancing exercise. Indeed, the test consists in three elements: confirming that all five attributes of good aid have been established, considering that there are no manifest negative effects, and verifying two additional criteria.

The first two steps bring no added-value. In fact, an aid must always fulfil the criteria of contribution to an objective of common interest, necessity, proportionality, appropriateness and

[90] RAG, paras 112-140.

incentive effect, in order to be approved: a lack of any of these elements immediately excludes its compatibility with the internal market.[91] Likewise, the finding of any manifest negative effect automatically eliminates aid as incompatible.[92] In other words, lack of any of the required attributes or presence of a manifest negative effect means that an aid will never get to the stage of the balancing test. Hence, balancing is replaced by summarising.

However, the law-maker introduced two additional elements to the balancing test: 1) creation or strengthening of a dominant position and 2) creation or deterioration of the overcapacity on a market in decline. Both criteria apply to individual aid under Scenario 1, and the criterion of dominant position applies also to investment aid schemes. The first criterion does not seem to constitute an ambiguous question, especially taking into account the Commission's practice under Article 102 and merger control, as well as the fact that substantial market power concerns only a limited number of cases. The second criterion is brought down to a technical exercise of calculation of a negative or positive growth rate of the market, by reference to the benchmark growth rate.

To sum up, the Commission is not led to balance the positive and negative effects of a RAG aid. Indeed, the complex weighing of pros and cons, which brings controversial judgment calls known from the literature on antitrust,[93] has thus been replaced by a simple checklist. It is also interesting to observe that the simplification has been achieved within the framework of State Aid Modernisation. Hence, although it is suggested that more economics involves "deeper case-specific analysis"[94] and concepts difficult to apply in practice,[95] economic approach may also create better rules that preserve predictability.[96] The incentive effect and balancing test show that economic approach may also be a tool of 'simplification' of assessment, which is a valuable conclusion for determining the optimal criteria.

4.3. Conclusion

State aid assessment involves application of criteria, whose level of complexity varies from one criterion to another but also from one act of soft law to another. Next to the criteria simple in

[91] RAG, para 26a-e.
[92] RAG, paras 118, 128, 139.
[93] Frank H Easterbrook, 'Limits of Antitrust' (1984) 63 Texas Law Review 1; Rebecca Haw Allensworth, 'The Commensurability Myth in Antitrust' (2016) 69 Vanderbilt Law Review 1.
[94] Christiansen and Kerber (n 1) 235–240.
[95] Ulrich Soltesz and Felix Schatz, 'State Aid for Environmental Protection The Commission's New Guidelines and the New General Block Exemption Regulation' (2009) 6 Journal for European Environmental & Planning Law 170.
[96] Friederiszick, Roller and Verouden (n 59) 657.

application, such as the proportionality test, lie complex discretionary assessments, such as evaluation of aid's distortive effects. Overall, complexity of State aid assessment lies in two elements. First, some criteria clearly reflect complex rules, by relying on a diversity of open-ended notions requiring careful market analysis. In general, State aid assessment after SAM is considered to be more cumbersome than it was the case under previous acts of soft law.[97] Second, it is the volume of information needed for evaluation of 5 State aid criteria and 6 compatibility criteria. The amount of information necessary to provide and process in order to carry out even a superficial examination of these criteria is significant, which may be observed, for instance, when looking at the level of detail of supplementary information sheets.

Complexity of the assessment criteria determines how difficult it is to overcome the informational asymmetries. Indeed, it has previously been concluded that the preliminary examination may successfully enforce criteria simpler than those suitable for the formal investigation. However, the above analysis perceives State aid assessment criteria as one set of more or less complex rules. This leads to the core of the problem, namely whether the State aid assessment rule is optimal for any of the two procedures and how this result could be achieved.

5. The optimal assessment rule for EU State aid assessment[98]

Complexity of an assessment rule must be adapted to the risk of error in application in order to avoid ineffective enforcement. Indeed, each State aid procedural stage creates different potential for overcoming informational asymmetries, in conformity with the objective it pursues. Hence, in the preliminary examination the Commission needs to establish beyond any doubt that a measure is not harmful, while in Phase 2 it proceeds to a comprehensive evaluation. Accordingly, two assessment rules should be distinguished, explicitly or implicitly, in order to account for the optimal complexity in the preliminary examination and the optimal complexity in the formal investigation. However, there is only one State aid assessment rule, which inevitably leads to suboptimality that should be addressed.

[97] Phedon Nicolaides, 'An Economic Assessment of the Usability of the New General Block Exemption Regulation for State Aid (Regulation 651/2014)' (2014) 10 European Competition Journal 405–406.
[98] Parts of this section were published in: Anna Nowak-Salles, 'The Optimal Assessment Rule for EU State Aid Assessment' (2020) 43 World Competition.

5.1. One assessment rule in State aid assessment

The substantive law indicates that the Commission carries out investigations essentially the same in scope at both stages of the procedure, because it needs to address identical characteristics of a measure independently of the procedural stage. Furthermore, State aid reforms suggest that the Commission focused its efforts on the most effective distinction between desirable and undesirable measures,[99] but it did not take into account how this result may be best achieved when applying law at different procedural stages. However, with one set of criteria applied under two procedures, the doubt emerges how the boundary between an initial view and an in-depth investigation is drawn, and how it is secured that both the preliminary examination and the formal investigation are accurate. In other words, one may interrogate himself what is the difference between the assessment in the preliminary examination and that in the formal investigation, if both consist in application of exactly the same rules, but in different procedural set-ups.

Moreover, judging by the content of individual criteria as well as the overall complexity of this set of rules, the character of the assessment seems to be adapted rather to the second than to the first phase of the procedure, as it is doubtful that complex issues could be addressed in the preliminary examination. This would further mean that in fact, the scope of Phase 1 is not defined. Dealing with complexity in Phase 1 is even more puzzling when contrasted with Phase 2 decisions, which highlight that individual elements of assessment are complex and equivocal, and that the preliminary examination is often not even a 'quick' look at these sophisticated issues. For instance, an Oxera's report on *ex post* evaluation of measures demonstrated that the Commission completely omitted in its preliminary analysis several issues potentially important for the impact of aid on competition,[100] which suggests that assessment in Phase 1 may tend to be incomplete, especially when such complex criteria as distortions of competition are at stake. If the Commission's incomplete assessment leads to ending the procedure in Phase 1, these shortcomings will never be corrected in the formal investigation.

One might argue that although different assessment rules have not been explicitly laid down in the substantive law, an implicit distinction is operated by the Commission as the latter treats the same criteria in a simplistic way in the preliminary examination and explores their

[99] By aiming at the "refined economic approach," "less and better targeted aid" in line with the Lisbon strategy, "promotion of good aid," "more efficient capturing of bad aid" and other, indicated in SAAP and SAM.
[100] Oxera, 'Ex Post Assessment of the Impact of State Aid on Competition' (2017) 30–47; Nicole Robins and Hannes Geldof, 'Ex Post State Aid Analysis: First Impressions' (2018) 17 European State Aid Law Quarterly 503–505.

complexity in the formal investigation. For instance, it could adopt a certain standard of simplified assessment of all criteria or elaborate a key to identifying the criteria to focus on in particular. Nevertheless, aside from the fact that nothing suggests that the Commission follows such approach, it would create an even higher risk that Member States or beneficiaries take advantage of such discretional superficial assessment. Indeed, if there is a set of complex criteria, and the Commission applies them by using to the best of its abilities the potential of the preliminary examination, then this situation constitutes a perfect illustration of the risk identified in the previous sections. Namely, it applies a complex rule in the procedure, which is not adapted nor intended to tackle such rule, and hence it runs the risk of error in its application. In other words, the assessment rule that the Commission applies is not optimal for that procedural stage. This inconsistency results in the risk of Type 2 errors, because complexity makes it more difficult to overcome informational asymmetries, while information provided solely by the State biases the Commission towards approval of aid.

Therefore, the question arises as to a simplified version of the assessment, which could be successfully applied in Phase 1. The search for the optimal scope of the preliminary assessment is even more pertinent in the light of the recent judgments of the General Court, in which Phase 1 decisions were annulled because the Commission had not carried out an assessment required to form an initial view that the measures were certainly harmless.[101]

5.2.Superdominance of Phase 1 decisions

Another argument in the discussion on the probability of error is provided by statistics of State aid enforcement by the Commission. Indeed, out of 4873 State aid decisions, those adopted in the preliminary examination constitute over 93% of all decisions, or 4542 Phase 1 against 358 Phase 2 decisions.[102] Corresponding to this trend, 97% of decisions are positive, or 4747 positive decisions against 174 negative ones. Visibly, positive decisions, especially those adopted in Phase 1, dominate very strongly.

[101] T-68/15, *HH Ferries I/S, formerly Scandlines Øresund I/S and Others v Commission* (2018) ECLI:EU:T:2018:563; T-630/15, *Scandlines Danmark ApS and Scandlines Deutschland GmbH v Commission* (2018) ECLI:EU:T:2018:942; T-631/15, *Stena Line Scandinavia AB v Commission* (2018) ECLI:EU:T:2018:944; T-79/16, *Vereniging Gelijkberechtiging Grondbezitters and Others v Commission* (2018) ECLI:EU:T:2018:680; T-793/14, *Tempus Energy Ltd and Tempus Energy Technology Ltd v Commission* (2018) ECLI:EU:T:2018:790; T-108/16 *Naviera Armas, SA v Commission* (2018) ECLI:EU:T:2018:145.

[102] Statistics from the period 30/08/2008 – 15/01/2020. The totality of 4873 decisions does not correspond to the sum of positive and negative decisions, because some decisions are in part positive and in part negative and therefore are classified twice.

This observation is key in justifying the study of the probability of error in State aid enforcement. First, the fact that the decision-making is concentrated in Phase 1, which is prone to Type 2 errors, confirms the concerns related to erroneous non-openings of formal investigation procedures. Indeed, were most measures adopted in Phase 2, erroneous acceptances in Phase 1 would constitute mainly a theoretical problem without practical implications. Clearly, with more decisions issued in Phase 1, the risk of Type 2 errors materialises more often.[103] Second, provided that the complexity of the assessment rule is more adapted to the formal investigation than to the preliminary examination, this rule may secure correct outcomes only in 7% of cases. Hence, although efforts to increase the quality of the formal investigation are legitimate, it is uncertain whether the gains from correct assessments in Phase 2 may outweigh the losses from errors in the super-dominating Phase 1. Third, was the Commission aware of the problem brought by complexity of rules in the preliminary examination, it would tend to be cautious about measures and recur to the formal investigation more frequently. On the contrary, the popularity of Phase 1 decisions may confirm that the Commission has neither reflected on the problem nor tried address it, even *ad hoc*. Finally, it is important to urgently address the issue since the rate of errors may be enhanced by path dependence: dominance of positive decisions, whether correct or not, may incite to adoption of even more positive decisions, creating the snowball effect. This tendency may further negatively impact the standard of assessment, because it may lead to shortcuts,[104] dull the Commission's vigilance, and because an erroneous assessment in one case may be extended to similar cases.[105]

Naturally, it may well be that positive decisions are that numerous simply because measures notified by Member States are unproblematic, and the Commission is right to approve them. There is no claim in this thesis that positive decisions dominate the negative ones because they are erroneous, nor that the error rate is very high. However, just like one may not measure the number of erroneous decisions, one may also not indicate the decisions that are accurate. The risk that the Commission falls in the trap of too complex rules may not be eliminated so that the problem persists, unless guarantees for accuracy are provided by bringing this risk maximally down.

[103] David S Evans and A Jorge Padilla, 'Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach' (2005) 72 University of Chicago Law Review 22.
[104] Richard A Posner, 'An Economic Approach to the Law of Evidence' (1999) 51 Stanford Law Review 1477, 1495.
[105] Evans and Padilla (n 103) 32.

5.3.Search for the optimal assessment rule(s)

Until now, this chapter focused mainly on the characteristics of the State aid procedure and the problems related to it. This section will propose a solution, namely to separate the assessment rules under the preliminary examination from those under the formal investigation. The minimum is to obtain guidance or clarification, reassuring that the standard of assessment in the preliminary examination is consistent and adapted to the resources and the mission characterising that procedural stage.

5.3.1. Difficulties in changing the procedure

Looking in abstract at a discrepancy between the assessment rule and the procedure, one could suggest as a remedy either to adapt the rule to the procedure or the other way around. Out of these two solutions, adapting the State aid procedure is less desirable than changing the State aid assessment rule.

It could be argued that the assessment rules are fixed (may or should not be changed), so that the procedure must allow to accurately enforce them, and the probability of error could be lowered by increasing the public or private expenditure.[106] However, Member States are not incentivised to rise their expenditure (the private one) because logically, they prefer to grant aid at the lowest cost. At the same time, since State aid constitutes a negotiated administrative rule-making,[107] and since it lies in the interest of Member States to maintain the system that favours them "procedurally and substantively,"[108] it is unlikely that similar changes to the procedure succeed.

Alternatively, one might try to increase the duration of the preliminary examination or introduce tools acting as 'checks' with regards to information provided, such as Commission's own investigation or rights for the aid beneficiary.[109] Nevertheless, such changes would contradict the idea of the preliminary examination as a short phase targeting only the simplest measures: new investigation tools might blur the boundary between the two phases of the procedure and unnecessarily duplicate the formal investigation.[110] The preliminary examination in its form

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[106] Richard A Posner, 'An Economic Approach to Legal Procedure and Judicial Administration' (1963) 2 The Journal of Legal Studies 399, 441; A Mitchell Polinsky and Steven Shavell (eds), *Handbook of Law and Economics* (Elsevier 2007) 428.
[107] Kelyn QC Bacon, *European Union Law of State Aid. Third Edition* (Oxford University Press 2017) 49.
[108] Sir Jeremy Lever, 'Some Procedural Conundrums in State Aids Law', *The law of State aid in the European Union* (Oxford University Press 2004) 304.
[109] Massimo Merola and Marie Debieuvre, 'The New Approach to State Aid: Contributions and Limits Form Case Law of the European Courts', *Competition law and economics : advances in competition policy enforcement in the EU and North America* (2010) 415–417.
[110] Adinda Sinnaeve, 'Block Exemptions for State Aid: More Scope for State Aid Control by Member States and Competitors' (2001) 38 Common Market Law Review 224.

fulfils the important function of sparing the long thorough assessment to State measures desirable for the market, so that one shall strive to preserve that function, instead of replacing it by that assigned to the formal investigation. Finally, from a purely practical perspective, it seems more realistic for the Commission to unilaterally adapt its assessment than for 27 Member States to agree on a legislative change.

Therefore, one shall respect the current State aid design, which accounts for the goals of efficiency and timeliness in assessing State measures as well as reflects the careful compromise reached at the level of Member States in the Council. While increasing Commission's powers could be, in theory, a good solution, in State aid it turns out to be both difficult to organise and ignorant of the differing functions of Phase 1 and Phase 2, as described in Section 3.3. of this chapter.

5.3.2. Two optimal assessment rules

If changing the procedure is not optimal, one needs to base its proposition on the conclusion that each procedural stage has a different assessment rule, which may be enforced with the lowest risk of erroneous decision.

Obviously, one set of assessment rules is undesirable, independently of whether it is more suitable for the preliminary examination or the formal investigation. If rules are too complex for Phase 1, the Commission's tendency to commit Type 2 errors will lead to non-openings of desirable formal investigations. On the other hand, if rules are too simple for Phase 2, measures will be accurately sent to the in-depth assessment but the Commission will be unable to tell the difference between good and bad aid and will underperform in Phase 2. In order to avoid the compromise, it is necessary to reflect on the content of the assessment rule for each procedural stage separately.

The basis for distinguishing between the optimal assessment rule for each procedural stage is to acknowledge that complex rules pose higher requirements, and these requirements may be met by each procedural stage to a different extent. Indeed, in the preliminary examination, the Commission has limited possibilities to overcome the informational asymmetries, because it cooperates mainly with the State and has shorter time and less investigatory powers. Thus, it runs the risk of error in application of a complex rule, which undermines the very idea of using such rules and calls for finding a right balance between the effective distinction between desirable and harmful measures on the one hand, and accurate application of such rules on the

other. It has even been signalled by the former Chief Economist himself that while much of the information necessary to adopt a more economic approach depends on the cooperation by Member States, a rigorous economic assessment is hampered by procedural shortcomings.[111]
In the same vein, if the Commission is expected to form an initial view of the measure in order to identify certainly unproblematic measures, one needs to reflect on what an initial view shall consist in. In some sense, measures falling under the notification obligation but clearly harmless are somewhere between the GBER measures and potentially harmful measures deserving a deeper investigation in the formal procedure. The assessment rule shall focus on identification of such measures and let another assessment rule be responsible for the full investigation. Hence, "saturating" the preliminary examination with complexity is undesirable since the optimal assessment rule should be relatively simple, because only clear-cut measures are targeted by the quick approval. Simplicity fits this procedure better and reduces the gap between, on the one hand, what is expected from it and on the other, what it realistically can deliver. In other words, its point of balance between the simple and the complex, which guarantees the most accurate identification of desirable measures, is definitely more on the simple side than in the formal investigation.
Indeed, simple criteria based on technical, objective and clearly defined information would allow to more easily discover ignorance or bad faith of the State or the aid beneficiary, by-pass the evidentiary inconsistency, and minimise the risk brought by absence of third parties. By addressing the informational asymmetries to the extent designed for this phase, the Commission could more accurately identify measures requiring further inquiry. In addition, such criteria would make the question of the existence of doubts less obscure, thus facilitating the judicial review of Phase 1 decisions (which will be discussed in detail in Chapter 3). Finally, more clear-cut assessment could discipline Member States and increase compliance in the long run: when facing clear informational obligations, the States would notify only measures for which they gathered necessary information. As the States themselves could assess the chances of success of a notification, they would design their measures accordingly, and could better prepare for the foreseeable formal investigation from the beginning.

Naturally, the exact balance between the risk of over- or under-inclusion due to oversimplified rules on the one hand, and the risk of error in application on the other, would not be the same for all criteria, and even not the same for similar criteria under different guidelines. Each

[111] Friederiszick, Roller and Verouden (n 59) 660.

criterion must have its own optimal complexity, depending on the point, at which the benefits from the simple equal the costs of foregoing the complex. However, it is not the object of this thesis to propose concrete solutions to specific assessment criteria: identifying the extent to which they could be simplified without becoming ineffective belongs in an important part to the economic theory. Still, one may think of some general points: introducing check-lists for the preliminary assessment of negative effects of aid on the market, better guidance as to in what cases the existence of a market failure is unequivocal, or stricter requirements concerning appropriateness of the measure (demonstration of effectiveness of aid as compared to other potential tools). One could even think of introducing financial thresholds, above which aid would have to be evaluated in Phase 2, or opening Phase 2 automatically with regard to sectors, where market structure and characteristics appear particularly complex to the Commission. It is, of course, very arbitrary to try to recommend any concrete solutions. Independently of any tangible changes, the Commission, and even the Court of Justice, should first clarify, or determine, the optimal scope of both the preliminary examination and the formal investigation.

5.3.3. Suggestions to clarify (or identify) the difference

Because each procedural phase has its own optimal point of balance between two types of risks, it is logical that this difference be accentuated somewhere in the vast body of State aid law. The lack of any evidenced refection on that point and ignorance of the procedural aspect of assessment is the most significant mistake within the framework of the probability of decisional errors.

Although possible, it does not seem to be necessary to change the law itself, which could be a cumbersome and not very flexible process. In particular, it is not questioned that an aid, for instance, needs to be appropriate or have an incentive effect: it is about how these criteria are interpreted when they are applied at different procedural stages, which may be accomplished through the decisional practice. For instance, the Commission could adopt guidelines, best practices or other type of document, clarifying its priorities in forming the initial view or explaining how it approaches the same assessment criteria at the two procedural stages. In the event that there currently exists no structured approach to the preliminary examination, which may be deduced from the Commission's practice, it would certainly be worth elaborating on the appropriate standard of assessment. Aside from the economic support, the most desirable scope of the assessment could be based on Commission's rich experience in application of rules and in observing Member States' notifications. Undoubtedly, this would benefit the quality and

transparency of State aid decision-making, increase legal certainty and facilitate the subsequent judicial review.

In parallel, the Court of Justice could impose on the Commission uniform requirements concerning the detail of assessment, by defining its desired scope when it examines actions for annulments against non-openings of a formal investigation. In other words, the unclear character of the notion of "serious doubts", which separates the two procedural stages, could be used to clarify the content of the preliminary examination.

In addition, although it is easier to suppose that the criteria are too complex for the preliminary examination, there is also no indication that they are optimal for the formal investigation: maybe the latter could handle more complex rules, or maybe the current rules already are too complex to be enforced. The Commission could ask itself this question, or the Court of Auditors could examine whether the currently existing assessment criteria are optimal. Such a study could extend to the formal investigation, in order to ensure that the depth of assessment the latter offers is fully exploited to reach the most truthful outcomes of State aid assessment.

In this context, the conclusion that State aid enforcement is suboptimal as long as it does not distinguish between simple rules for Phase 1 and complex rules for Phase 2 is the starting point for elaborating the optimal assessment criteria and determining their future evolution, especially as they are considered to be complexified with each reform. For instance, some criteria could be shared by both procedural stages, some could be simplified for the preliminary examination while some could become more complex for the purpose of Phase 2 assessment. The choice should be made by evaluating both the effective distinction between practices and the possibility to apply the rule in the day-to-day practice.

5.4. Conclusion

Currently, State aid law does not ensure that accuracy in the assessment at each procedural stage is optimal. Indeed, there exists one set of relatively complex rules, which create the risk of being misapplied in the preliminary examination. In addition, with the preliminary examination constituting over 90% of State aid enforcement by the Commission, lack of reflection on the probability of error in the context of the more economic and effect-based approach may lead to unnecessary Type 2 errors. The Commission should devote more attention to this issue in order to elaborate the criteria that will secure desirable outcomes, which must differ for the preliminary examination and the formal investigation.

6. Conclusion

This chapter approached the question of the probability of error and concluded that it definitely may be brought down. The analysis was based on the distinction between simple and complex rules as well as on the accuracy achieved through, on the one hand, effective identification of desirable and undesirable measures operated by the rule and, on the other, effective application of the rule. Since the preliminary examination pursues a limited objective, which is to identify only straightforward measures, and provides for limited time and investigation tools, simple rules are naturally better suited for that phase, because they do not bring high risk of error in application. On the contrary, the formal investigation aims to examine a measure in depth, and the corresponding tools allow to successfully apply more complex rules, and therefore distinguish between good and bad aid with more precision.

However, the necessary difference between the optimal assessment rules for each procedural stage is not acknowledged in State aid assessment criteria. Indeed, the law is a mix of simple and complex criteria, but without any explicit or implicit distinction between two procedural stages. This suggests the Commission has never reflected on error in application and that the assessment, whose rules are not adapted to the procedure, must be suboptimal and less accurate than it could be. Consequently, the Commission should carry out an analysis on that point in order to identify the scope of and the difference between the preliminary examination and the formal investigation. This is the way to lower down the probability of decisional errors.

It must be recalled that the probability of error constitutes only a part of the equation of the expected cost of error. Indeed, the latter englobes also the cost of error, where different types of errors have different costs, so that a preference for a specific type of error might ideally be established. This relationship between the lowest probability of error and the cheapest error is targeted when minimising the expected cost of error. The cost will therefore be the next element of the present analysis.

Chapter III – Costs of error

1. Introduction

In the previous chapter, it was considered that the probability of error may be brought down by identifying the optimal assessment rule for the preliminary examination and for the formal investigation. The optimal complexity, which implies simpler rules in Phase 1 and more complex in Phase 2, currently is not reflected in the substantive and procedural law, so addressing this issue would have positive effects on accuracy in decision-making.

The second step is the cost of error. Indeed, "distinguishing pro-competitive from anticompetitive actions with certainty is impossible."[1] Therefore, all comes down to the expected cost of error, determined by the probability of error multiplied by its cost.[2] An error that is both costly and likely may produce "a significant social detriment".[3]
Consequently, one needs to face the choice between different types of errors according to their costs. In practice, the question is that of whether it is better to safeguard the current tendency to issue positive decisions (with the false negatives it brings), or it would be beneficial to have more negative decisions (and more false positives). Naturally, different factors need to be taken into account in order to carry out such an analysis. In addition, this chapter does not endeavour to identify actual amounts of costs – while this could potentially be achieved by measuring welfare effects or costs of carrying out a procedure, such precision is complex and unnecessary for the discussion. Indeed, the fact that one does not measure the cost implies neither that this cost is insignificant, nor that the analysis is pointless.

Aspiring to cover various components of the cost of error, and to uncover their practical implications for State aid enforcement, this chapter will consist of three sections. As the basis for the discussion, different costs of errors will be identified in Section 2. The intuition as to the cheapest type of error will be fully developed in Section 3, which will suggest the preference for Phase 1 Type 2 errors that may prevail in State aid control. Section 4 will discuss potential problems in maintaining and applying this preference, due to the fact that the probability of

[1] Christian Ahlborn and others, 'DG Comp's Discussion Paper on Article 82: Implications of the Proposed Framework and Antitrust Rules for Dynamically Competitive Industries' (2006) 21.
[2] Richard A Posner, 'An Economic Approach to Legal Procedure and Judicial Administration' (1963) 2 The Journal of Legal Studies 399, 401.
[3] Mark Anderson and Max Huffman, 'Iqbal, Twombly, and the Expected Cost of False Positive Error' (2010) 20 Cornell Journal of Law and Public Policy 1, 24; Andrey Makarov, 'Anti-Competitive Agreements in Russian Courts (2008–2012): Antitrust Law Implementation and Interpretation' (2019) 31 Post-Communist Economies 4.

Phase 1 errors is relatively high while the cost of error may change over time. That section will also offer the solution, namely it will re-emphasise the necessity to reflect on the optimal assessment rule for each procedural stage, in order to bring the probability of error maximally down.

2. Costs of erroneous State aid decisions

Placing "a price tag"[4] on the consequences of an error clearly is impossible. However, it is feasible to decompose the overall cost of an error into specific costs, and then discuss their elements. Therefore, first, the direct cost of error, namely the non-prevented harm or the lost benefit, will be discussed. Second, considerations on the impact of errors on the States' behaviour will be developed. Third, the discussion will focus on the procedural costs. Finally, several other costs, which are less relevant in the present context, will be mentioned.

It must be noted that this section aims only to identify the costs of errors, without concluding on the preference for one of them, which will be discussed in Section 3. Therefore, while the description of the costs may lead to some preference intuitively emerge, the main discussion is kept for the later stage.

2.1.Harm inflicted by aid or its foregone benefit

The most obvious consequence of an error is the effect that the presence or the lack of the measure will have on the market. Thus, one of the costs of erroneous positive decisions is the harm caused by undesirable measures, while erroneous negative decisions cost us the lost benefit of desirable aid.

2.1.1. What harm and what benefit

In general, non-captured undesirable aid contributes to the distortion of "the level playing field", to "preventing or delaying the market forces from rewarding the most competitive firms, thereby decreasing overall European competitiveness" and "may lead to a build-up of market power in the hands of some firms"; this eventually harms consumers through "higher prices, lower quality goods and less innovation".[5] Moreover, granting a harmful aid is a waste of public money, which has the opportunity cost of not spending it for other purposes.[6]

[4] Posner (n 2) 401.
[5] SAAP, para 7.
[6] SAAP, para 8.

In more concrete terms, the theory of harm, on which State aid law relies, refers to distortions of competition generated by bad aid. The harm may take different forms, such as reducing effective competition by supporting inefficient production (keeps inefficient firms or sectors in place), reducing effective competition by distorting dynamic incentives (by altering the investment incentives of firms), reducing effective competition by increasing market power (a firm or a group of firms increases or maintains market power, by foreclosing actual or potential competitors) and finally, distorting production and location decisions across Member States (negative international spillovers may induce subsidy races where every Member State ends up worse off.)[7]

In contrast, if aid is needed to remedy a market failure, its prohibition may maintain the undesirable situation on the market. Indeed, the benefit expected from aid is to correct a form of market failure, resulting either from informational asymmetries, from positive externalities, or from market power.[8] The benefits of good aid, unlike its negative effects, are spelled out in the Treaty itself: it may promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment, promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy, facilitate the development of certain economic activities or of certain economic areas, or promote culture and heritage conservation.[9] In the absence of aid or other form of State intervention, the market alone will not achieve those objectives.

2.1.2. Variety of elements that determine the magnitude of harm/benefit

Definitely, the magnitude of the harm/lost benefit is an individual question, and depends on the amount of aid and characteristics of the market. Indeed, it is reasonable to consider that the higher the stakes in the case (which do not have to be only pecuniary), the higher the social cost of an error,[10] while the impact of aid on competition may be clearly related to its amount, breadth and frequency.[11] It has also been suggested that that the more differentiated a market is, the less likely it is that aid will cause harm.[12] In addition, aid to large EU-wide or important

[7] Hans W Friederiszick, Lars-Hendrik Roller and Vincent Verouden, 'European State Aid Control: An Economic Framework', *Handbook of Antitrust Economics* (MIT Press 2007) 638–640, 652–654; David Spector, 'State Aids: Economic Analysis and Practice in the European Union', *Competition policy in the EU : fifty years on from the Treaty of Rome* (Oxford University Press 2009) 190–191.
[8] Spector (n 7) 176.
[9] Article 107(3) TFEU.
[10] Richard A Posner, 'An Economic Approach to the Law of Evidence' (1999) 51 Stanford Law Review 1477, 1484, 1486.
[11] Oxera, 'Ex Post Assessment of the Impact of State Aid on Competition' (2017) v–vii.
[12] Spector (n 7) 183.

input markets would generally have higher impact on trade than aid to a niche segment.[13] However, calculation of the impact of aid in an individual case remains virtually impossible, due to the fact that many elements of such assessment are not quantifiable.[14] Still, it is reasonable to expect erroneously evaluated aid to generate relatively high costs, since after the extension of the scope of the GBER, the Commission deals only with 'the most distortive aids.'[15] The stakes in Commission's decisions being high, also the costs of errors must be important.

Independently of the harm or the lost benefit directly resulting from an erroneous decision, the question is whether the consequences may, in the future, be mitigated or removed by the forces of the market. On the one hand, harmful effects of a behaviour (aid) may eventually be removed by market forces, since markets self-correct. On the other hand, the costs of a wrongly forbidden behaviour (aid) may be reduced by adopting second-best solutions by market operators.[16] Such arguments touch upon the discussion on the preference for Type 1 or Type 2 error, and will be approached in detail in the following section.
Moreover, one should take into account the possibility to correct error, either by the General Court or the Commission itself, as well as the possibility that a measure falls under another set of rules, e.g. internal market law. These aspects will be the object of Chapter 4. In addition, a project of aid that was erroneously rejected may be modified and re-notified by the State – under this scenario, the cost of error may be reduced to the cost of the delay in the granting of aid.[17]

Therefore, the first cost of error is extremely individual and may decrease over time. Although the real cost of a harmful aid or of an erroneously prohibited aid is ungraspable both at the general level and in individual cases, aid with high budget or scope is certainly more likely to result in costly errors.

2.2.Effect of errors on incentives – deterrence

[13] Friederiszick, Roller and Verouden (n 7) 655; Spector (n 7) 190–191.
[14] In the context of antitrust: Alan Devlin and Michael Jacobs, 'Antitrust Error' (2010) 52 William & Mary Law Review 75, 95.
[15] SAAP, paras 17, 35.
[16] However, the pertinence of this argument in State aid law is limited because the reason for granting aid on the market is that the market may not tackle the problem itself. The second-best solution could then consist in a different action of the State, which either does not involve aid, or involves a different aid measure.
[17] Provided that the modified aid allows to tackle the issue as effectively as its predecessor.

The second cost of error consists in distortion of future choices made by Member States. Indeed, mistaken prohibitions and approvals warp actors' incentives in two ways. First, they may undermine the deterrent effect of a provision, and second, they may impair a strategy to favour a specific behaviour. These two effects do not equal each other. More specifically, the aim of a law may be either to deter actors from undertaking unlawful behaviour or to incentivize them to undertake a specific desirable behaviour. While the deterrent effect has as its consequence that actors undertake, instead of a harmful behaviour, a beneficial or less harmful one, the "inducement effect"[18] has a different objective: among a range of behaviours, which include desirable and undesirable ones, or even are all beneficial, the actor should choose the action that brings the highest social benefit. To put it differently, under the deterrent effect, the objective is to minimise costs, while under the inducement effect, it is to maximise benefits.

The cost traditionally associated with the decisional error is its negative impact on the deterrence effect. Hence, one shall outline the deterrence theory and explain why it takes preponderant place in the analysis of error costs. Taking into account the procedural set-up of State aid control, it is straightforward to try to apply deterrence to the grant of illegal aid. As to the notification procedure, it does not take many arguments to exclude validity of the deterrence concern.

2.2.1. The concept of deterrence and its relation to the cost of error

According to the basic deterrence theory, when the external harm of an act exceeds its private gain, that act should be, as socially undesirable, deterred at the lowest social cost. Deterrence is achieved by imposing sanctions, namely fines or imprisonment: naturally, in State aid set-up, whereby recovery is the most invasive response to illegal incompatible aid, only fine-alike sanctions are concerned. In order to achieve deterrence, the expected sanction (measured as magnitude of sanction multiplied by its probability) must exceed the expected gain from the act. Given that violations may not be detected with certainty, the regulator must choose the probability with which the sanction will be imposed. Accordingly, when the probabilities of enforcement are less than one, which is virtually always the case, proper deterrence requires sanctions to be in excess of harm[19] - the nominal sanction is increased by a multiplier, which brings the expected sanction back to the equality with the harm. Such expected sanction may,

[18] The term "inducement effect" will be used in this context in order not to create confusion with the "incentive effect", which is a criterion of assessment of the compatibility of aid.
[19] A Mitchell Polinsky and Steven Shavell (eds), *Handbook of Law and Economics* (Elsevier 2007) 421.

thus, be achieved either by increasing the sanction or by increasing the probability of detection, and deterrence is achieved by combination of these two elements.[20] It may be noted that it is preferable to combine the highest possible fine with low probability of detection, since enforcement entails costs.[21] Needless to say, establishing the right balance is a delicate exercise, which in case of increase in probability of detection needs to be seen in light of enforcement costs.[22]

The probability of detection is strictly related to errors. Errors affect deterrence because they lower that probability, by which they change marginal costs and benefits of a harmful conduct.[23] False convictions diminish deterrence because they lower the expected sanction, while false acquittals diminish deterrence by reducing the difference between the expected sanction from violating and not violating the law, thus making violations less costly.[24] Both effects may lead to a socially inadequate level of activity.[25] The optimal level of deterrence may be re-established by raising either the probability of detection (by increasing expenditure on the enforcement, eliminating errors) or the magnitude of the sanction, which is related to costs.[26]

Therefore, Type 1 errors deter actors from undertaking a beneficial behaviour, because they bring a risk that such behaviour will be condemned. When the incentive to take a socially desirable action is diminished, an undertaking may decide either not to undertake any behaviour at all or, faced with a choice between a harmful and beneficial behaviour, it may choose to commit a harmful act, if it procures more private benefit.[27] Accordingly, knowledge that the Commission is more likely to make Type 1 errors could discourage the States from granting any aid, even beneficial.[28] They may also further impact the States' incentives to notify the designed aid at all: false convictions may encourage the States to circumvent the notification stage and grant aid directly, which saves them time and costs of notification. In contrast, Type 2 errors encourage actors to engage in undesirable actions, because they may remain undetected. In State aid, knowledge that the Commission commits many Type 2 errors would

[20] The theory of deterrence was summarised and explained in: Alex Raskolnikov, 'Deterrence Theory: Key Findings and Challenges' (2019) 1–4.
[21] Polinsky and Shavell (n 19) 413–414, 421–422.
[22] As mentioned in the introduction, enforcement costs will not be analysed specifically, since suggestions made in this thesis offer better accuracy at a lower enforcement cost.
[23] Jonathan B Baker, 'Taking the Error out of the "Error Cost" Analysis: What's Wrong with Antitrust's Right' (2015) 80 Antitrust Law Journal 1.
[24] Polinsky and Shavell (n 19) 427.
[25] Under the strict liability standard: ibid 429.
[26] ibid 428.
[27] Baker (n 23) 6.
[28] Type 1 errors may have as an indirect effect to incentivise a State to grant aid to another area, where aid may be beneficial – this case will be discussed at a later stage of the analysis.

encourage the States to purposefully notify and grant harmful measures and become negligent when self-assessing measures before notification. That way, errors make the behaviour depart from the social optimum.[29]

2.2.2. Deterrence from granting illegal aid

In State aid, the intuition is to suspect the recovery order (and potential actions for damages) to constitute a sanction, which may potentially have the deterrent effect. It is also clear that the Commission does not have the possibility to decide on the level of fine, because the extent of the sanction is determined in Procedural Regulation: the sanction is the amount of aid to be recovered increased by interest rates. This is important, because while the most straightforward solution to deterrence diluted by errors is to increase the fine,[30] this option is unavailable in State aid. Hence, the Commission could only increase the probability of detection, in which case elimination of errors would be helpful. Whether deterrence could be applicable to illegal aid will be analysed below. For the purpose of the following analysis, Member States are assumed to be risk-neutral.

There are two fundamental problems with equating recovery to a sanction. First, it does not impose any additional financial burden because it constitutes a simple restitution of the amount obtained (with interests). Second, recovery does not sanction the granting State but the recipient undertaking, so the Member States have no direct reason to be discouraged from granting illegal aid in the future.[31] However, although the typical concept of deterrence is slightly warped, recovery and damages actions may still fulfil their function. Indeed, a Member State may wish to avoid political costs of requiring recovery from the beneficiary, as well as, if it is genuinely interested in improving economic situation of its nationals, it may be discouraged from undertaking a project that may subsequently be destroyed by the Commission recovering aid. On the other side, the recipient undertaking that suffers from recovery may become more cautious when applying for and accepting aid.

While State aid control may be said to be a strict liability system, where lack of notification is punished independently of whether a State was or was not negligent in designing and self-assessing the measure, its effect on deterrence distinguishes between the States aware and those

[29] Warren F Schwartz, 'Legal Error', *Encyclopedia of Law and Economics*, vols 1. The History and Methodology of Law and Economics (2000) 1038.
[30] Polinsky and Shavell (n 19) 428.
[31] Sir Jeremy Lever, 'Some Procedural Conundrums in State Aids Law', *The law of State aid in the European Union* (Oxford University Press 2004) 312.

unaware than they are in breach of the notification obligation. Indeed, if a State is convinced that a measure did not constitute aid and thus was non-notifiable, illegality results from ignorance, because had the State known the measure was aid, it would have notified it. In such a case, recovery may only incite the State to fill the lack of knowledge or to be more cautious in the future (it may deter it from negligence). The deterrent effect is much more straightforward with regard to the States that realise that a measure should be notified but decide not to do it, counting that the Commission will not discover aid and that recovery will never be ordered. Hence, there exists a behaviour that could be targeted by deterrence.

Illegality as such falls under the competence of national courts: unlike the Commission, they may order recovery of aid on the sole basis it was granted in violation of the standstill clause. The Commission's power is limited to attaching a recovery order to a negative decision, once an illegal aid is also found to be incompatible.[32] Since the Commission does not condemn a premature granting of aid but its incompatibility, an illegal compatible aid may not be recovered without intervention at the national level. Therefore, the effectiveness of Article 108(3), together with the potential deterrence effect, is ensured in the first place by national courts, which is in line with the case-law of the CJEU.[33] The Commission may intervene only at a later stage on the basis of Article 258 TFEU, provided that it ordered recovery of incompatible aid and that the Member State did not execute the recovery order.

Taking into account that the deterrent effect may be achieved by the Commission only with regard to incompatible illegal aid, the relevant errors are those in the compatibility assessment. On the one hand, if the Commission adopts an erroneous positive decision, and thus does not order recovery, it will not deter the State. On the other hand, if it adopts an erroneous negative decision, and orders recovery of a compatible aid or of a measure that is not aid, the State may be led to notify measures which it correctly considers not to constitute aid. Such unnecessary notification is undesirable because it engenders unnecessary costs of procedure with regard to measures notified only by fear of their mistaken recovery in the future.
Therefore, while recovery of aid has its shortcomings, mainly that it burden relies on the "innocent" beneficiary and that the money is transferred back to the State, it may not be excluded that the higher the probability of detection of illegal aid, the higher the chance that

[32] C-39/94, *SFEI and Others* (1996) ECLI:EU:C:1996:285, paras 41-43.
[33] C-120/73, *Lorenz GmbH v Germany* (1973) ECLI:EU:C:1973:152, para 8; C-354/90, *FNCEPA v France* (1991) ECLI:EU:C:1991:440, para 16.

either the Member State or the beneficiary will restrain from hastily granting/obtaining aid in the future. This may not be said at all about the rest of State aid control, namely the notification procedure.

2.2.3. Inapplicability of the deterrence effect to the notification procedure

It is intuitive that the notification procedure does not leave room for the objective of deterrence. The reasons for that conclusion will be briefly explained, as they will be recalled at the occasion of uncovering other goals of State aid policy related to incentives (namely, the inducement effect described in Section 2.2.2. below).

In the notification procedure, it is difficult to identify a behaviour from which a State could ideally be deterred. One may not claim that the States should be prevented from designing bad aid, because the very fact of establishing an *ex ante* system of control at the EU level includes the assumption that a State may not, due to lack of expertise or objectivity, operate an accurate distinction between good and bad aid. Moreover, such an assumption sits awkwardly with the objective of deterrence, which is to avoid the harm caused by a given behaviour. Indeed, it is straightforward to doubt what harm is done by *notifying* measures: projects generally do not cause harm. As to the costs of designing measures and carrying out the procedure, the assumption inherent to any *ex ante* system of control is that these costs are lower than the overall benefits from such assessment.

Furthermore, the behaviour of a State consisting in purposefully designing harmful aid may not be targeted as such. Indeed, if the system functions well, i.e. if the Commission effectively distinguishes harmful from beneficial aid, then whether a State acts on purpose or not is irrelevant, because harmful measures will be identified and prohibited. In such a case, notifying even harmful aid does not cause harm, so that there is no action to deter the Member States from. Moreover, and provided that harmful measures are effectively detected, the States will anyway be deterred from intentionally notifying bad aid, as this would constitute a waste of the State's resources in light of low chances of success.

Finally, as no harm is caused, the *ex ante* system of control does not provide for monetary or non-monetary sanctions in a traditional sense of this word.[34] However, since the deterrent effect depends on the probability of detection multiplied by the sanction, the absence of the latter impedes application of the entire reasoning.

[34] Polinsky and Shavell (n 19) 407–420.

2.2.4. Conclusion

Deterrence may have effect on States' decisions to illegally grant unnotified aid, even though the system is not optimal, because it targets the recipient of aid and not the national decision-maker behind its granting. However, deterrence is not an appropriate tool to evaluate costs of errors in State aid decisions following a notification procedure, simply because *ex ante* assessment is not designed to deter.

Since notification characterises the majority of State aid measures (whether it is the merit of effective deterrence, one may not conclude), the bulk of State aid enforcement remains outside the reach of deterrence. The incentives of notifying Member States are nevertheless impacted in the opposite direction: namely, they are encouraged to grant good aid.

2.3.Effect of errors on incentives – inducement effect

Although the deterrence effect does not fit into the logic of the *ex ante* part of State aid control, and the notification system does not intrinsically intend to shape behaviours in any particular way, it seems that the Commission in fact aspires to channel the States' choices. Indeed, while it does not deter the States from designing bad aid, it appears to encourage them to grant some particular types of good aid. This transition from enforcement of the prohibition of undesirable aid to convergence of national expenditures according to policy goals may be seen as transition from a negative to positive integration.[35] This further means that errors may compromise the overarching goals of the evolving State aid policy.

2.3.1. Negative versus positive integration: theory and practice

In order to identify the underlying objective of State aid law – prevention from granting bad aid or rather incentivisation to grant good aid – one shall determine whether the central assumption is that aid is bad and should be prevented, or that aid is good and its use should be fostered. Both observations may be true and do not exclude each other; however, if one prevails, it probably determines the strategy in the area of State aid control. The theory and practice provide inconsistent indications as to which approach is privileged in State aid policy, but a clear tendency seems to emerge.

[35] Fritz W Scharpf, 'Negative and Positive Integration', *Governing in Europe: Effective and Democratic?* (Oxford University Press 1999); Applied to State aid law by: Michael Blauberger, 'From Negative to Positive Integration? European State Aid Control Through Soft and Hard Law' (2008).

The Treaty suggests a negative character of integration within the framework of EU State aid law, which is based on the general incompatibility rule. Member States should restrain themselves from granting aid, the latter being in general incompatible with the internal market and thus undesirable. With such an approach to State aid control, the objective would be to preclude the States from granting any aid. Therefore, if the emphasis is put on the last line of Article 107(1) ("incompatible with the internal market"), deterrence would be justified, and it would consist in discouraging the States from designing any aid. Naturally, the abovementioned limits to the effectiveness of the deterrent effect would still apply.

In contrast, the practice suggests that the general incompatibility rule is not central to State aid control. More attention seems to be given to paragraphs 2 and in particular paragraph 3, on the basis of which aid may be found compatible with the internal market. A departure from Article 107(1) can be deduced from two elements. First, from the proliferation of acts of soft law based on Article 107(3) and the extension of the scope of the GBER. Especially the latter is considered to bring State aid control "as close to positive integration as possible".[36] Second, from the Commission's tendency to issue positive decisions, both in the preliminary examination and in the formal investigation[37] (around 60% of Phase 2 decisions are positive.) These elements convey the message that much more emphasis is put on positive effects of aid than on negative ones and therefore, the initial presumption that aid is bad has evolved either into neutrality of aid, or even into its desirability.

At this occasion, one may need to justify that the dominance of positive decisions may be due to a changed perception of State measures. Indeed, the Commission does not need to strictly pursue the objective of eradicating aid any more, as it was the case when aid was mainly a way to circumvent the restrictions resulting from the completion of the internal market.[38] Today, with the support of the economic science, more consideration may be given to the fact that in some cases, not only is aid harmless, but it may be beneficial or even necessary to achieve important goals – an obvious example is horizontal aid, such as environmental or RDI aid. Moreover, following the economic crisis and developments in the area of economic and monetary union, awareness of the relationship between national measures and the European

[36] Blauberger (n 35) 22.

[37] The fact that the probability of Type 2 errors in the preliminary examination may be high, as it was extensively discussed in Chapter 2, does not preclude one from interpreting the Commission's tendency to adopt positive decisions. Indeed, there is no claim in this thesis that Phase 1 decisions are that numerous because they are erroneous; instead, because they are numerous, the probability of error is a serious matter worth a reflection. The reasons for them being so numerous is a separate matter.

[38] European Commission, 'Completing the Internal Market. White Paper from the Commission to the European Council' (1990) 158–159.

economy emerged, so that the goal of State aid law may become to contribute to a more cost-effective public spending.[39] Furthermore, it is no secret that the aim of the after-Lisbon EU is to direct public spending at policies promoting growth, employment and competitiveness, and that State aid may be a tool to achieve that.[40] Even more, Europe 2020 growth strategy explicitly foresees such a role for State aid policy.[41] Finally, in the SAAP, the Commission pointed at the "key priorities" for national State aid policy, "better targeted aid" and "modernised State aid policy in the context of the Lisbon strategy for growth and jobs".[42] These goals were confirmed in SAM, where the Commission related State aid control to a better use of taxpayers' money.[43] Consequently, it may be considered that the Commission "created positive integration from above,"[44] which translates into the inducement effect of State aid policy.

2.3.2. The inducement effect in State aid law

Positive integration in State aid may be translated into the Commission's endeavours to induce the States to invest into areas that are the most desirable from the point of view of EU policies. However, the obstacle to obtaining such most desirable, according to the Commission, measures is that the decision to grant a specific type of aid does not belong to the Commission, but to the States. Hence, if a Member State is to take the decision how to spend its money, it may be given incentives to spend it in a way suggested by the Commission.

A) Diverging interests of the Commission and of the State

The basis for the inducement effect of State aid law is that compatible aid in some areas benefits the Union more than compatible aid in other areas. If a State already spends its scarce resources, the same amount of money may bring more benefits if it is injected into one area over another. Indeed, the Commission may estimate the benefits of some types of aid to exceed the benefits of others: all measures are beneficial, but some more. Thus, the Commission's objective may be to maximise the social gain and for this purpose, to identify the most beneficial categories of aid. Subsequently, it may create the corresponding incentives for the Member States so that

[39] Vittorio Di Bucci, 'The Modernisation of State Aid Control and Its Objectives: Clarity, Relevance, Effectiveness' (2014) 2014 Italian Antitrust Review 10.
[40] Conor Quigley, 'The European Commission's Programme for State Aid Modernization' (2013) 20 Maastricht Journal of European and Comparative Law 38–40.
[41] Communication from the Commission: Europe 2020 - A strategy for smart, sustainable and inclusive growth, COM(2010) 2020 final, p. 19.
[42] SAAP, Sections I and II.
[43] SAM, para 14.
[44] Michael Blauberger, 'Of "Good" and "Bad" Subsidies: European State Aid Control through Soft and Hard Law' (2009) 32 West European Politics 719.

the latter, when deciding how much money to spend and on what, align their choices with those of the Commission.

Whenever a State faces a choice between two compatible aid measures, it needs to compare their benefits and costs. However, this cost-benefit analysis will be characterised by uncertainty, related to the chance for a successful implementation of the measures;[45] in State aid law, the source of this uncertainty is the necessity of an *ex ante* approval by the Commission. Hence, the State must estimate the probability of carrying out a project, which will be based on his *a priori* reasoning and the available evidence.[46] This exercise should lead it to choose the project whose benefit multiplied by the probability of approval is the highest. Indeed, it is generally in the interest of states, and even preferable for them, to design measures that stand a chance of being approved,[47] independently of whether the approval is correct.

Because the granting of aid is not a reciprocal transaction, the State's motivation may also be related to broader objectives.[48] However, in pursuing these objectives, the State is, generally, guided by its own interest. Thus, the private benefit (the benefit for the State) of aid does not have to correspond to its social benefit (the benefit for the EU). For instance, the State may derive benefit from pursuing the policy of investing into a nationally important sector (e.g. coal mines), which is inconsistent with a Commission's horizontal objective (environmental protection). The existence of such conflicts of interest is in fact the very reason for EU State aid law to exist in the first place. Provided that the Commission may effectively evaluate the social benefit derived from different types of aid, its objective becomes to make the States grant more of such desirable aids. However, unless a type of aid is beneficial both at the private and the social level, the Commission needs to convince a State to grant the socially desirable aid, even though it brings a lower private benefit.

B) Manipulating the expected benefit from different types of aid

A way to achieve a change of incentives is to manipulate the probability, with which different types of aid may be granted. More specifically, if an aid procures a small private benefit but is

[45] KK Seo and RE Peterson, 'Public Administration Planning in Developing Countries a Bayesian Decision Theory Approach' (1972) 3 Policy Sciences 371–372.
[46] ibid 374.
[47] Phedon Nicolaides, 'Decentralised State Aid Control in an Enlarged European Union: Feasible, Necessary or Both?' (2003) 26 World Competition 264; Blauberger (n 44) 729.
[48] Jose Luis Buendia Sierra, 'The Role of Competitors in State Aid Procedures' (2015) 14 European State Aid Law Quarterly 451, 451.

socially desirable, then increasing the probability (facilitating granting of such aid) will result in a higher expected benefit. Conversely, lowering the probability for an aid with a high private but low social benefit will lower the expected benefit for the State. Once the expected benefit of the socially preferable aid exceeds the expected benefit of the other option, the source of a higher private benefit becomes that which is socially most beneficial, so that the State should switch to such desirable aid.

When considering costs and benefits of designing a measure, it must be born in mind that states are very specific actors, which take into consideration specific interests. Hence, the Commission's efforts either to deter or incentivize may simply not be well-suited to address the States' motivation. On the other hand, a state's bad faith, when exposed, may send a negative image vis-a-vis other states and the Commission. Dishonesty brings reputational costs, which may undermine the State's credibility in making future commitments, weaken the State's position on the international scene and worsen its relations with other States. While it is difficult to measure value of reputation, it has been found that it adds to direct sanctions in determining whether a State will comply with international law.[49] In a community such as the EU, where negotiations and balancing of political interests determine day-to-day decisions, the benefit from a consistent non-compliance with State aid or other EU law may translate into loss or weaker position elsewhere.[50]

The States' motivation to design and subsequently notify a measure goes deeper than a simple deterrence applied to private actors. These specific interests are difficult to determine while they constitute components of the expected benefit that are not vulnerable to differing probabilities and thus quasi-impossible to address. However, it may be reasonably expected it is rare that such interests fully determine or even dominate States' choices, as the latter ultimately wish to effectively grant aid they design. Thus, when choosing the measure that will bring the highest expected benefit, they will value both the benefit and the probability of this benefit occurring. The subsequent analysis is concerned with that probability, because unlike the benefit, it may be altered by the Commission.

[49] Andrew T Guzman, 'A Compliance-Based Theory of International Law', *Economics of public international law* (Edward Elgar 2002) 90–95.

[50] Compliance with EU law and CJEU rulings partly in order not to put in danger the Member State's position within the EU was hinted at in: ibid 116–117.

In addition, each State has its own incentives that are influenced in a different manner, and each State separately assesses its expected benefit. Moreover, the impact on incentives depends on the national structure and authorities involved in granting/assessment of aid. Indeed, national, regional and local authorities may be involved together in the same case or separately in different cases. These authorities, again, may have different incentives and each one of them perceives and assesses the expected benefit differently. Hence, it may be considered that the more dispersed the granting authorities are, the weaker the effect of an individual error, because individual authorities may ignore decision-making applied to other authorities' measures, in other countries or even in the same Member State. As a result, changing incentives overall may be a complex procedure with non-uniform progress. However, Member States will further in this analysis be treated as one body that the Commission aims to influence, inasmuch as the expected benefit of each of them may be changed, although in a varying pace.

C) Sources of good incentives

If the Commission wishes to direct States' spending towards specific areas, it needs to make clear that granting measures in such areas is a 'safe' choice. As mentioned, one way to do so is to exempt clearly compatible measures from the notification obligation.[51] As to the notification procedure, the inducement effect may be achieved by reducing the number of negative decisions in favour of positive ones, preferably issued in the preliminary phase. A sign to the States that granting certain types of aid is smooth and to an important extent risk-free should incite them to design the desirable measures.

The fundamental stage of inducement is adoption of a legal framework favourable to desirable aid. Indeed, by basing on acts of soft law its decisions in individual cases, the Commission makes them binding on the States.[52] Thus, applying this framework indicates that some types of aid are more likely to be approved, so that the States design more of the desirable aid.

First, the distinction between aid falling under the GBER and notifiable aid encourages the States to design aid subject to the former, which allows to avoid the notification process, and thus to adjust their policies to the Commission's priorities.[53] Second, between notifiable aid, there are types of aid which are subject to acts of soft law and those which are not. Given a clear guidance as to the compatibility criteria, the States have more incentives to notify

[51] Kristyna Deiberova and Harold Nyssens, 'The New General Block Exemption Regulation (GBER): What Changed' (2009) 8 European State Aid Law Quarterly 27.
[52] Blauberger (n 44) 729.
[53] ibid 733.

measures falling under the scope of one of the acts of soft law, instead of measures that would have to be admitted directly on the basis of the Treaty.

However, the choice between different acts of soft law, which are designed in a very similar way, is not apparent. In addition, law is not very flexible and may not quickly be adjusted to developments of the policy. Hence, the Commission may further express its preferences through its decisional practice. It should, indeed, show more indulgence and be more prone to adopt positive decisions in the desirable areas than in others, in order to increase the expected benefit from granting such aid. For example, the Commission puts emphasis on the preference for horizontal over sectoral aid.[54] In this context, it might be recalled that as regards evidence requirements, the Commission is willing to accept the States' statements, even without any evidence, for regional, environmental or RDI aid. However, it is much more demanding in the application of the RR guidelines, as RR aid is considered by the Commission to have "a similar distortive effect on competition" as sectoral aid.[55] The consistent sceptical approach towards RR aid and lower requirements in other areas suggest that the Commission may use its decisional practice to create incentives.

The use of different evidentiary standards may encourage the States to grant aid where that appears easier. However, as it was mentioned in Chapters 1 and 2, low evidence requirements may contribute to a higher risk of error wherever criteria are complex and procedure simple. This is where the role played by error in the creation of right incentives becomes important.

D) Applicability of the inducement effect to State aid control

Concluding this section, one could ask how the inducement effect in State aid law may work if deterrence may not, as they seem to constitute two sides of the same coin – preventing bad aid against encouraging good aid. However, these two objectives are in fact situated at different levels. Deterrence pertains to the decision whether to notify or not a harmful aid, while inducement concerns a preceding stage, namely the decision as to the type of aid to be designed. Accordingly, the inconsistencies hampering the deterrent effect do not apply to creation of right incentives. Most importantly, the central issue is not that of the choice between harm and no harm, but rather between lower and higher benefit. Inasmuch as there is no benefit nor harm resulting from notification itself, inducement targets the scenario under which aid is approved and its benefit materialises: the goal is to maximise this benefit. In other words, inducement

[54] SAAP, para 14.
[55] http://ec.europa.eu/competition/state_aid/studies_reports/conceptual_remarks.html .

focuses on approval of aid, as opposed to deterrence that relies on prohibition. Consequently, unlike deterrence, inducement is natural to State aid control, because Member States will always have to spend their resources in some way, and these expenditures may be influenced so that they bring the highest possible benefit. Furthermore, inducement is not directly related to good or bad faith of the States, because it treats them as reasonable actors seeking benefit, independently of whether they subsequently use ethical or unethical means to obtain it.

2.3.3. Impact of errors on the States' incentives to invest in desirable areas

If negative decisions discourage States from granting aid while positive ones induce them to do so, false positives will have the corresponding effect. should impair, and false negatives strengthen, the effectiveness of the Commission's inducement strategy. Indeed, prohibiting desirable aid increases the risk of rejection (lowers the probability that aid may be granted), which reduces the States' incentives to align their choices with the Commission's preferences. The cost of such error is the lost benefit of the discouraged aid minus, if applicable, the benefit of the aid granted instead.[56] In contrast, Type 2 errors may be beneficial to the inducement effect. Indeed, they increase the probability of aid being granted, by which they contribute to the achievement of the broader objective of making the States invest in the desirable area more in the future. That benefit may, depending on the case, even reduce the distortive effects generated by the bad aid on the market. In contrast, Type 1 errors do not have such countervailing benefit. This counterintuitive conclusion means that it is not true that whatever the level of decision errors, the latter always reduce welfare,[57] because under some particular circumstances, errors may bring benefits.

In other words, when influencing the States' incentives by means of the decisional practice, mistaken prohibitions have the effect of discouraging the States from investing in the concerned area and switching either to bad aid or to other beneficial aid. In contrast, Type 2 errors, just like positive decisions in general, send a signal that the Commission welcomes expenditures on a given type of aid, by which they may bring the benefit of reinforcing the inducement effect.

Therefore, what is interesting to observe is that insofar as the inducement effect is concerned, decisions have the same effect independently of whether they are erroneous or not – a Type 1

[56] Increased by operational costs, as the State and the Commission need to repeat the entire procedure.
[57] Yannis Katsoulacos and David Ulph, 'Decision Errors, Legal Uncertainty and Welfare: A General Treatment' [2014] School of Economics & Finance Discussion Paper, no. 1408 1.

error has the same consequence for achievement of inducement objective as a negative decision, and the same holds for Type 2 errors, which work as correct positive decisions.
For instance, the Commission may wish to boost the use of aid in some area, but the States are not familiar with, or not inclined to grant, the concerned type of aid. In order to attract their attention, it may want to send an unequivocal signal that aid is needed, which it can accomplish by frequently approving aid (rightly or erroneously). Indeed, the States are generally not aware of the probability of error, as they may not know which measures were approved or rejected mistakenly. Instead, they observe the overall probability, with which different types of aid may be granted, and base on it the decision as to what aid to grant. Interestingly then, awareness of the error-rate is not necessary to make the State take the desirable choice. Consequently, where the harm from bad aid is negligible with respect to the objective of inducing investment, and because such an error serves to set a trend, it is possible that it has a lower cost than the benefit and therefore, it does not reduce welfare.

Naturally, it is not recommended that the Commission purposefully makes errors and approves aid that it clearly appreciates as harmful. However, the effect may be achieved in a more uniform and abstract way, through application of less strict evidence requirements. The inconclusive character of information sheets and guidelines, described in detail in Chapter 1, provides it with such flexibility. Accordingly, if the Commission lowers the standards to be followed by Member States when demonstrating that aid is good, the latter may be encouraged to submit such applications. On the other hand, the Commission risks more frequent commitment of Type 2 errors, but since such an error is seen by the States only as yet another positive decision, its cost may be eliminated, or at least reduced.
At a later stage, the Commission may toughen up its practice, so that it's still more beneficial to grant the desired type of aid, but the advantage over other areas does not have to be as distinctive as in the beginning. The Commission will just want to maintain the attractiveness of aid, for instance by adopting positive decisions in the conditions of uncertainty. Moreover, as the States do in fact grant more of desirable aid, the benefit of positive decisions may become lower, while costs of errors more visible. Indeed, not only do false negatives allow the harm to be inflicted on the market, but they may have as an effect that some States try to abuse the friendly environment, by notifying harmful measures or lowering the quality of information or evidence provided. Thus, the side-effect of inducement through errors may consist in 'spoiling' the States, so that the balance needs to be delicately struck, and the indulgence should be clearly targeted and temporary.

2.3.4. Conclusion

It is reasonable to claim that the Commission wishes to steer Member States' expenditures in order to derive the highest possible social benefit. The prevalence of inducement over deterrent effect stems from the evolution of State aid control as well as from the practical inapplicability of deterrence to State aid. In this context, the impact of errors on incentives is particularly important, because it refers to broader policy objectives in the area of State aid as well as European integration more generally.

However, errors do not always have to be harmful. Indeed, Type 2 errors increase the probability, with which the targeted aid may be granted, thus driving the States' expected benefit from aid up. Similarly, Type 1 errors in cases of less beneficial aid may lead to choosing a more desirable one the next time. A tool, with the help of which the Commission could steer the incentives in the desirable direction, could be temporary application of weaker evidence requirements in the targeted areas. While the risk of error would grow, it could be compensated by a more effective inducement. This potentially positive effect of an error influences the question of preference between different types of error, which will be appreciated in detail later on.

2.4.Procedural costs of an error

Another cost of error that may be singled out is that related to the cost of the procedure. Indeed, State aid control is not for free and each procedural stage has its cost. While resources spent by the Commission in Phase 1 and Phase 2 allow it to reach the most reliable and accurate outcome of assessment, they are lost without bringing a benefit when the procedure yields an erroneous result.

2.4.1. Costs of the State aid procedure

The costs of the procedure consist in resources spent in order to assess the case, and they include the opportunity cost. They cover, for instance, the fact of keeping agents away from other cases they could assess in that time, keeping undertakings in the situation of uncertainty about the measure, prolonging the time the market needs to cope without aid (in case of positive decisions); they also include the costs borne by the State and other actors involved in the procedure.

For the preliminary examination, the Commission needs to assess the notification provided by the Member State, identify the lacking information, send one or more request for information

to the State and analyse its response, in order to form an initial view on the measure. If it adopts a positive decision at this stage, it does not bear any costs any more, aside of course from subsequent monitoring or potential action on existing aid.

If the Commission opens a formal investigation procedure, it needs to spend resources, in addition to those spent in Phase 1, on analysis of comments from the Member States, potential comments from interested parties, the response of the State to the latter comments, as well as on the in-depth analysis. If it adopt a positive decision or a negative decision without recovery, it does not bear new costs, unless the decision is conditional – in such a case, compliance with conditions must be assessed by the Commission at a later stage. If the decision is negative with recovery order, the Commission needs to calculate the amount of aid to be recovered (plus interests). It may be obliged to reflect on arguments against recovery brought by the State or the aid recipient, based on concerns of legal certainty or legitimate expectations.

2.4.2. The effects of different types of error on procedural costs

The effect of error on procedural costs comes down to the fact that the Commission spends resources on unnecessary procedure or, on the contrary, it does not spend resources that it should spend on additional investigation. It is straightforward to note that adopting any decision, whether erroneous or correct, engenders procedural costs. However, when a correct decision is adopted, its benefits must, at least on average, outweigh the costs of the procedure – this must be assumed, otherwise there would be no point of establishing State aid control in the first place. Nevertheless, when a decision is erroneous, the benefits are not obtained, while the costs of the procedure remain.

In this context, the more complex the assessment, the costlier the error. Hence, Phase 1 decisions will generally be cheaper than Phase 2 decisions, because they are shorter and do not confer upon the Commission any investigative powers, which may be useful, but are costly. Indeed, costs are mainly borne by the interested parties, who prepare and submit their comments within the framework of the formal investigation, as well as by the States, who respond to them, and so on. Moreover, decisions that a measure does not constitute aid should be cheaper than decisions that a measure is compatible with the internal market, because each assessment starts with the qualification of a measure as aid, so in the absence of aid, compatibility assessment is not carried out. Naturally, it may happen that an assessment under Article 107(1) is more complex than the entire assessment in a decision not to raise objections – let us assume that this is not the usual situation.

It then logically follows that negative decisions engender higher costs, since they may only be adopted at the end of the formal investigation, as opposed to positive decisions, which may also be issued in the preliminary examination. Similarly, Type 2 errors have different procedural costs, since those adopted in the preliminary examination avoid the costs of the formal investigation. The additional cost attached to unnecessarily opened formal investigations (which in any case lead to a positive decision) is the opportunity cost of the time devoted to that investigation. The final cost is that caused by the delay in the granting of beneficial aid by the State, as it should be effective starting from an earlier date.

Another question is whether a Type 1 or a Type 2 error made in the formal investigation is costlier. As such, it would be arbitrary to claim whether assessment leading to a positive or a negative decision requires more resources. However, for recovery decisions, the standard cost of assessment will be increased by the cost of calculating the recoverable amount and potentially, analysis of arguments why recovery should not be ordered.

2.5. Other costs

Errors cause a variety of other costs beyond those analysed in detail above. One may indicate here two more: output legitimacy and legal certainty. Although they could be subject to a thorough analysis, they do not have any special features in State aid and therefore, they will be only briefly described; they have also been mentioned in the introduction of this thesis.

First, the Commission is not a democratically chosen body, so it does not enjoy a significant amount of input legitimacy.[58] Hence, it has the obligation of result: it derives its legitimacy from its effectiveness. Indeed, the rationale for the existence of such an institution lies in the benefits it brings: it reflects the "for the people" rather than on "by the people" rationale, and is "interest-based" rather than "identity-based".[59] In the same vein, if the Commission has been conferred upon certain competences, it is because it is believed to exercise them better than national authorities. Errors, both false positives and false negatives, cause over- and under-enforcement, both of which would demonstrate that the Commission is not as efficient as it is expected to be, and thus weaken its output legitimacy.

[58] Joris Larik, 'From Speciality to a Constitutional Sense of Purpose: On the Changing Role of the Objectives of the European Union' (2014) 63 International & Comparative Law Quarterly 27; Peter Clelland, 'How Best Can The European Union Bridge Its Democratic Deficit?' (2008) 11.

[59] Deirdre Curtin, *Executive Power of the European Union* (Oxford University Press 2009) 285–286.

Second, errors may create a situation of legal uncertainty, meaning that "actors are uncertain about the legal outcomes that will be assigned to a particular fact pattern."[60] Quite intuitively, both types of error reduce legal certainly, precluding the States (and the recipient undertakings) from being able to foretell the consequences of their actions. Indeed, if a State tries to design a measure, which fits the compatibility criteria laid down in guidelines, erroneous decisions may impact its legal certainty.

While very important, these two costs of error do not distinguish between the types of error, which forms the basis for the next step of the analysis, namely the preference between Type 1 and Type 2 errors.

2.6. Conclusion

Among different costs brought about by errors in the Commission's State aid decisions, three main costs may be distinguished. First, the harm caused by erroneously admitted undesirable aid or the lost benefit of erroneously prohibited beneficial aid. Second, the cost (or the benefit) derived from a change in a State's behaviour, when the objective is to incentivise to grant particularly desirable types of aid. Third, errors do not allow the costs of the procedure to be offset by the benefits from correct outcomes: these costs get higher as the procedure reaches further steps, so that Type 1 errors should be the most costly.

Identification of the costs of error and distinction between the costs of false positives and those of false negatives, naturally gives some hints as to which error might be considered to be cheaper. Therefore, the analysis will be pushed further to explore the potential preference for one type of State aid error.

3. Preference between different types of error – which one to choose?

If errors have different costs, it is intuitive to suggest that the Commission chooses the error that costs the least, so that the expected cost of error is brought down. Such a choice makes part of the decision theory, "a neutral economic tool"[61] that indicates what decision should be taken in the conditions of uncertainty. In State aid, this issue certainly is not marginal: first, because

[60] Kevin E Davis, 'The Concept of Legal Uncertainty: Definition and Measurement' [2011] Working Paper Series, New York University School of Law 10.
[61] Baker (n 23) 2.

uncertainty is an intrinsic feature of competition law in general[62] and even more of prospective analyses,[63] and second, because as it was demonstrated in the previous chapter, the error-rate may potentially be high. Thus, identifying the cheapest error would allow to importantly reduce the expected cost of error in State aid decision-making.

3.1.Preference for Type 2 errors in the literature

It has become common to consider that false acquittals are preferable to false convictions. Indeed, the general preference for under-enforcement, whose origins are to be looked for in criminal law, was transplanted into antitrust.[64] The assumption underlying this belief is that benefits of a condemned harmless behaviour are lost forever, while harmful effects of a wrongly admitted behaviour will eventually be eliminated due to the self-correcting nature of the market.[65]

Nevertheless, the aversion to erroneous convictions was subject to a more elaborate investigation, leading to equivocal conclusions. For instance in criminal law, it was considered that as the severity of the sanction decreases, the optimum probability of convicting the innocent raises.[66] In antitrust, the preference may seem questionable, as advantages of false negatives and disadvantages of false positives were considered, by some, to be overestimated. [67] In particular, the faith in the capacity of the market to (swiftly) remove the harm done by a Type 2 error might prove overoptimistic.[68] At the same time, the costs of a Type 1 error may be lowered by second-best solutions, e.g. efforts of an undertaking to expand the market share by increasing output and decreasing price in case of a prohibited merger.[69] Moreover, the presence of a plaintiff and a defendant before the Court, as well as the possibility to settle instead of litigating introduces to the analysis elements, which are not shared between the American and the EU law, and even less between antitrust and State aid control.[70] Therefore, even if antitrust traditionally endorsed preference for Type 2 errors, "an unqualified predilection" in their favour

[62] Massimo Merola and Jacques Derenne (eds), *The Role of the Court of Justice of the European Union in Competition Law Cases* (Bruylant 2012) 31–36.
[63] Devlin and Jacobs (n 14) 105.
[64] Devlin and Jacobs (n 14); David S Evans and A Jorge Padilla, 'Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach' (2005) 72 University of Chicago Law Review 18; Frank H Easterbrook, 'Limits of Antitrust' (1984) 63 Texas Law Review 1.
[65] Devlin and Jacobs (n 14) 79.
[66] Posner (n 2) 416.
[67] Baker (n 23); Devlin and Jacobs (n 14).
[68] Erik Hovenkamp and Kevin A Bryan, 'Startup Acquisitions, Error Costs, and Antitrust Policy' (2020) 87 University of Chicago Law Review, in particular 336–339.
[69] Devlin and Jacobs (n 14) 107.
[70] See, e.g. the analysis in: Anderson and Huffman (n 3); Devlin and Jacobs (n 14); Baker (n 23).

would be "unsuitable."[71] With growing criticism of the traditional preference for Type 2 errors and the resulting under-enforcement,[72] unconditional prevalence of false negatives in all sectors[73] seems to have no future.

3.2. Inapplicability of the antitrust preference to State aid

The existence, in the area of antitrust itself, of doubts as to validity of the preference for Type 2 errors is the first argument, for which its transposition to State aid law may not be automatic. Moreover, a number of differences between antitrust and State aid enforcement call for caution.

3.2.1. Different assumptions under ex ante assessment

The basis for preference for Type 2 errors is the assumption that most actions are pro-competitive – this is why in the case of uncertainty, an action should be allowed; were most actions anticompetitive, the recommendation would be opposite.[74] However, *ex post* and *ex ante* systems of control do not have to share the preference: in fact, it appears that decisive in the context of error preference is the *ex ante* character of control. In US merger law, for instance, it is argued that there is no such aversion to Type 1 errors as in antitrust, which is deduced from lower thresholds of proof (the anticompetitive effect of a merger must be likely, as opposed to dangerously probable or almost certain in antitrust) as well as from the courts' practice regarding evidence in merger cases. In addition, mergers are considered to constitute only one, and not always the most efficient way to achieve the "optimal scale on the market," so that prohibition of a merger will incline the undertakings to take other action to strengthen their position, thus reducing costs of prohibition. Therefore, the costs of both types of error may be more evenly balanced than in antitrust, so that there is no need to insist on erring, in general, on the side of Type 2 rather than of Type 1 error.[75]

That observation constitutes, however, an oversimplification, and it does not seem to easily apply to State aid. Indeed, whether aid is generally considered to be desirable or not is a complicated matter, which was discussed within the framework of positive versus negative character of State aid integration. At the level of control by the Commission, certain types of aid may be considered to be particularly desirable and generally compatible, and thus fall under the scope of the inducement effect. In such a case, positive decisions and false acquittals may

[71] Devlin and Jacobs (n 14) 81.
[72] American Antitrust Institute, 'The State of Antitrust Enforcement and Competition Policy in the U.S.'
[73] The suitability of such a preference to start-up acquisition was questioned in: Hovenkamp and Bryan (n 68).
[74] Easterbrook (n 64) 15.
[75] Devlin and Jacobs (n 14) 106–109.

be preferred, especially if they reinforce the effect. On the other hand, aid to sectors, from which the Commission wishes to discourage the States, should preferably be addressed by negative decisions, in order to create or maintain right incentives. Therefore, even though a behaviour is not harmful, in the context of the Commission's policy it may be prohibited. Finally, aid generally considered to be incompatible, such as operating aid, would reflect the preference for negative decisions and Type 1 errors. Therefore, it is impossible to apply one conclusion about compatibility of State aid in general. It is interesting to observe that while preference for Type 2 errors seems to dominate in antitrust literature (especially in the U.S.), one may find in EU law signs that Type 1 errors might be preferable in certain areas, e.g. by imposing by object restrictions. The analysis of antitrust falls outside the scope of this thesis, so it will be concluded that independently of the extent to which it in fact is reflected in antitrust, any general preference for Type 2 errors suggested in the literature may not directly apply to State aid law.

Moreover, an important difference between antitrust and State aid law is that in many ways, antitrust resembles criminal law. This thesis will not analyse this issue in detail; suffice it to remind the ECHR judgment attributing a criminal nature to antitrust proceedings.[76] Therefore, the similarities to error preference in criminal law are, to some extent, justified. However, State aid control, by its *ex ante* character and the lack of sanctions, may not be assigned to the same category. As a consequence, if one searched for the origins of the antitrust preference for false acquittals in its similarities with criminal law, the related considerations could not directly apply to State aid.

3.2.2. Self-correcting markets

Some antitrust arguments based on the self-correcting nature of the market may not apply to State aid, such as the argument according to which the time will tell whether a practice is competitive or not, as only procompetitive practices will survive. However, aid does not have the same effect as a behaviour tested by the market, which stems from the fact that State aid control deals primarily with states, not firms.[77] Indeed, an inherent attribute of aid is that it grants an advantage that could not appear on the market on its own motion. In other words, while in antitrust, had a firm not spent its resources to undertake the harmful behaviour, it would have spent them on something else, an injection of money from outside of the market constitutes an otherwise inaccessible bonus, targeting a firm or group of firms. For instance, a rescue and

[76] European Court of Human Rights, Case *Menarini Diagnostics S.R.L. vs. Italy*, complaint 43509/08 (2011).
[77] Friederiszick, Roller and Verouden (n 7) 644.

restructuring aid can alter the order of exit and induce the immediate closure of other firms.[78] The situation of the aid recipient may also improve significantly vis-à-vis other competitors if the sector concerned is subject to significant credit constraints.[79]

Furthermore, the idea of self-correcting nature of the market struggles with State measures that create the basis for a repeated grant of aid, i.e. aid schemes. Indeed, partial removal of negative consequences of aid may take place as competitors learn to function more effectively under changed circumstances: the market adapts to aid. However, aid granted on the basis of a scheme will continuously cause harm anew and may raise entry barriers, so that the harm may become more difficult to tackle, e.g. by new entrants.

Another argument in favour of false acquittals, which is relied upon in antitrust, is that consequences of a judgement (Type 1 error) are more difficult to remove than consequences of an accepted anticompetitive behaviour (Type 2 error), because markets can resolve their problems alone, while remedying an erroneous enforcer's decision may need to involve legal steps. However, in antitrust the choice is between changing the existing situation (by condemning a behaviour) or not intervening: thus, Type 2 errors arise mainly from inertia. In contrast, in State aid a Commission's action is not an alternative, but is imposed by the notification system whereby control is always triggered: there is no inertia to assign to one type of error. Indeed, the Commission must intervene, because it is asked to decide whether a behaviour may be undertaken: it makes a decision on whether harm will be done or whether a benefit will be obtained. In other words, the Commission's choice is not between intervening or leaving the situation as it is, but between allowing the grant of a measure or not.
Even if the Commission ends the procedure by considering that a measure does not constitute aid, and thus does not proceed to the compatibility assessment, it must have still carried out the preliminary examination, except that this procedure is shorter than if it led to a compatibility test. In addition, finding of no-aid may not be assimilated to lack of intervention because a measure may be found not to constitute aid even after a formal investigation, where intervention is already quite advanced and costly. Hence, the Commission may not, in any case, refrain from taking a decision, with the result that whether a notified aid is granted or not on the market is always the Commission's explicit positive or negative decision, the consequences of which the market needs to address. Consequently, the "non-intervention and leaving it to the market"

[78] ibid 638.
[79] Spector (n 7) 185.

argument is not valid in State aid law: once again, the difference between an *ex post* and an *ex ante* assessment impacts the analysis. Of course, the argument would work better with regard to unnotified aid, whether the Commission may decide to investigate it or not to react.

Additionally, according to proponents of Type 2 errors in antitrust, plaintiffs should be mistrusted because they often have "wrong incentives" and manipulate decision-makers by alleging antitrust infringements.[80] Such a suspicion mandates cautiousness in condemning undertakings, and further confirms the preference for false acquittals. However, in State aid the argument of a 'vicious plaintiff' would rather work in the opposite direction, supporting a preference for false convictions. Indeed, the States may have "wrong incentives" in designing and notifying incompatible aid in order to achieve their own objectives. Just like plaintiffs in U.S. antitrust cases, they are interested in a particular result of the proceeding (the approval of aid), which does not have to be in line with the law. What is more, they may potentially be encouraged to act in bad faith, due to the non-adversarial character of the State aid procedure, discussed above. Hence, a prudent approach would lead to reluctance to approve aid easily, so that this typical antitrust conservatives' argument in favour of Type 2 errors would favour Type 1 errors in State aid decisions.

3.2.3. Plurality of costs to be taken into account

Finally, the discussion in antitrust pertains mainly to the first cost of error identified above: the harm done by a behaviour. However, one may not ignore the two other costs when contemplating the possible preference. Indeed, the antitrust analysis does not conclude on the impact on market operators' incentives: it limits itself to general observation that false convictions diminish incentives to undertake even harmless conduct. However, one would need to consider whether the fact that markets possibly self-correct could argue in favour of *more* harmful behaviours instead of *less* harmless ones, in light of other costs the errors produce. For instance, it has been argued in the preceding section that State aid errors not only harm the market, but have effects on States' incentives and are related to certain procedural costs. Consequently, distortions of the market following an error, which are the central concern in the traditional literature on antitrust preference, may not be conclusive for State aid control simply because State aid error entails various costs, that must all be weighed against each other.

[80] Easterbrook (n 64) 34–36; Baker (n 23) 25–26.

Moreover, this issue is related to the question of the changing cost of error, which will be discussed in Section 4.

3.3. The State aid error with the lowest cost

Given that preference for one type of error may not be extended from antitrust to State aid, one shall compare the costs of different errors in order to indicate which of them, on average, are the cheapest. Of course, exact costs are not measurable, as well as it would be arbitrary to assign specific weights to different types of costs. However, the lack of numbers, which characterises also the analysis in antitrust, does not prevent one from drawing reasonable conclusions.

One may recall that the errors being compared are: Phase 1 errors, namely error that a measure does not constitute aid and a decision not to raise objections, and Phase 2 errors, namely an erroneous negative and positive decision.

3.3.1. Three costs of error

As regards the harm or lost benefit resulting from an error, this question is, naturally, very individual and case-specific. Certainly, it is assumed that some aids are generally harmful while some bring important benefits, but it does not answer the question of how big the harm or benefit of individual aid actually is. Even for operating aid, which is generally considered to be harmful, one may not determine precisely the harm it would cause. In other words, the harm does not depend on the type of error, but on the specific aid, its amount, sector concerned, the market situation and others. Errors do not affect these pre-existing elements. Therefore, a distinction between Type 1 and Type 2 errors as such is not helpful.

A potentially interesting distinction could be the one between Phase 1 and Phase 2 decisions, because as the timing of those decisions is different, the level of harm could be affected. Naturally, such discussion pertains only to Type 2 errors, because Type 1 ones may be adopted only in Phase 2.

More specifically, the harm could increase or decrease depending on the moment at which the aid is granted. In the case of a Phase 2 positive decision, the granting of harmful aid will be postponed, which will allow the market to work without the harm for a longer time. On the other hand, if aid is approved and granted already in Phase 1, the market may already start to address the error and recover. With the time, the situation on the market may change in such a way that aid will impact a smaller part of the sector or that the market more effectively deals with the error. Nevertheless, it may well be the other way around because ultimately, it will

depend on the market and on the aid itself. Such a change is outside the Commission's control so that it is too speculative to conclude on whether unnecessary aid should be granted earlier or should better wait for Phase 2.

It is easier to point at a preference within the framework of the inducement effect. As it was described above, Type 2 errors bring the benefit of an increased probability of successful implementation of a desirable aid. Conversely, Type 1 errors in an area, from which the Commission wishes to discourage the States, have the benefit of lowering the expected benefit from aid and by this, of changing the States' incentives. However, it seems reasonable to consider that Type 2 errors bring a higher benefit than Type 1 ones, because they direct the States' resources to concrete desirable areas, so they effectively carry out an inducement policy. Type 1 errors may support that objective, but they may not achieve it on their own, because while they discourage the States from granting aid to one area, they do not indicate the area to which the resources should be put instead.

Decisions that a measure is not aid do not contribute, or contribute to a lesser extent, to the inducement effect, because they do not lead to a compatibility assessment. Indeed, while the notion of aid is objective and falls under the Court's scrutiny and interpretation, the compatibility assessment is more flexible and involves the Commission's discretion, by which the latter may create incentives. A no-aid decision is therefore neutral with regard to that objective.

Hence, Type 2 errors in the compatibility assessment should distort States' incentives less than Type 1 errors. Furthermore, Phase 1 errors should have a stronger inducement effect than Phase 2 errors, because the facility of obtaining quick approval sends a stronger signal that aid may be safely granted than a costlier and longer formal investigation.

The preceding discussion on the costs of procedure is self-explanatory within the framework of the preference. Errors made in the preliminary examination will be preferred to any type of error occurred in the formal investigation, as they save the procedural costs of Phase 2. In addition, an erroneous Phase 1 decision that a measure does not constitute aid is cheaper than an erroneous Phase 1 decision not to raise objections, because the preliminary examination in such a case is shorter and entails less resources. Similarly, an erroneous negative decision with recovery may entail higher procedural costs than a positive one, because it requires to unnecessarily calculate the amount to be recovered and to bear the costs related to enforcement of recovery.

3.3.2. Phase 1 error as the cheapest error

Considering the abstract considerations above, it appears that, first, Type 2 errors are cheaper than Type 1 errors and that further, Phase 1 Type 2 errors are cheaper than Phase 2 Type 2 ones. The final balance depends, of course, on the harm/lost benefit of the specific aid concerned, as well as on the existence of an inducement strategy with regard to the type of aid concerned. It is also worth noting that the higher the potential harm/lost benefit, probably the higher the impact on States' incentives.

It may be added that while a Phase 1 no-aid decision entails lower procedural costs than a Phase 1 decision not to raise objections, it may not really contribute to the inducement effect. Therefore, for the purpose of further considerations, it will be concluded that Phase 1 error is the cheapest, without distinguishing between a no-aid and a not-to-raise-objections decision. In any case, the distinction between Phase 1 and Phase 2 errors will be essential for this chapter.

If a Phase 1 error may be cheaper than a Phase 2 error, it seems legitimate to verify whether any preference for one type of error is expressed in State aid law or practice.

3.4. Observable preference?

It may be asked whether an indication as to the preference for one type of error may be observed somewhere in State aid enforcement. Indeed, from how State aid control is approached in legal acts and handled in practice, the direction of the preference may be deduced. This issue is related to the basic question of whether most aid measures (and at a lower level, specific types of aids) are considered to be mainly beneficial or harmful.

Staying at the level of the Treaty and the Procedural Regulation, a preference towards Type 1 errors emerges quite clearly, essentially from the general incompatibility rule enshrined in Article 107(1) TFEU. On the other hand, basing one's opinion on the sole wording of the Treaty could be incomplete, because the Treaty foresees exemptions in paragraphs 2 and 3 of Article 107, its provisions were adopted relatively long time ago and that policy-oriented changes to the treaty could in any case seem precarious and unlikely. However, the Procedural Regulation clearly points at the necessity to adopt a negative decision "where the information provided is

not sufficient to establish compatibility" of aid.[81] The Regulation has been adopted much more recently, and it is still explicit on that point. Therefore, one could suspect that if such a provision has been laid down, it is because the legislator has a preference for erroneous negative decisions.

Nevertheless, a similar conclusion would be inconsistent with the Commission's decisional practice. The arguments that were brought forward to indicate the high probability of a Type 2 error in the preliminary examination may be interpreted, in the present context, as reflecting the preference for Type 2 errors. Indeed, reliance only on information provided by the State, lack of concrete standard of evidence, as well as interpretation of "serious doubts" point that a risk of a Type 2 error is somehow accepted. Additionally, if one values the positive integration in State aid more than the negative one, which seems to be the tendency, some indulgence towards Type 2 errors is likely. Therefore, it is interesting to observe that at the high level of law-making, aid is generally considered to be incompatible. However, at the down-to-earth level of application of law, involving assessment of specific types of aid, the presumption changes and aid is in fact considered to most often be desirable.

An interesting observation is that while potential preference for Type 2 errors could appear in Phase 1, it would not extend to Phase 2. Indeed, in the formal investigation, the proportion of positive to negative decisions is much more balanced (around 60% positive to 40% negative decisions, which may be contrasted with 97% of Phase 1 decisions being those not to raise objections). From the perspective of the procedural costs, this would be a logical move, because it is cheaper to commit a Type 2 error in Phase 1 than in Phase 2. Therefore, whether or not the Commission makes an informed decisions about erring on the side of Type 2 error, and whether or not that decision is based on perception of costs, it seems to follow the preference for Phase 1 Type 2 error.

3.5. Conclusion

Even though the antitrust preference for Type 2 errors may not be applied to State aid enforcement because they are based on a different reasoning, it seems that there might exist, in fact, a preference for false acquittals. Furthermore, a Phase 1 Type 2 error seems procedurally cheaper and might contribute to the inducement effect of State aid policy.

[81] Procedural Regulation, Art. 9(7).

This section, as well as the relevant literature, analysed the cost of an error as unchanging, for which once established preference is always valid. The next section will call into question such once and for all preference, and identify the solution to help the preference for Phase 1 Type 2 errors survive.

4. The expected cost of error – the interplay between the probability and the cost

For now, the cost of error has been analysed in abstract: out of the excepted cost of error (probability of error multiplied by its cost), only the second component has been analysed. On the basis of the identified costs of error, a preference has been drawn for Phase 1 Type 2 errors. However, the probability of error may not be ignored, because a change in the probability entails a change in the expected cost. This section will recall the findings of Chapter 2 in order to warn that it may not be excluded that due to difference in probabilities, a different than a Phase 1 Type 2 error could in fact be preferable. In addition, it will be suggested that also the cost of error is not given once and for all, because it may change as the number of error increases.

4.1.Different probabilities of error at different procedural stages

The preference for a type of error is useful as long as the probability of that error occurring is fixed. However, under some circumstances, such as a two-stage procedural framework, the same type of error may occur with different probabilities, which influences the error preference. This phenomenon has been identified in Chapter 2 of this thesis: the error with the lowest cost (Phase 1 Type 2 error) seems to occur with a relatively high probability. In contrast, a Type 1 error may bring higher costs, but there is a lower probability it will be committed. Because the expected cost of error is obtained from the probability of error multiplied by its cost, one should reflect on the probability before concluding on preference.

4.1.1. Preference for error under constant probability

For the purpose of this section, one may imagine a system, in which the error rate is fixed and amounts to 40%. Out of all erroneous decisions, 10% constitute Type 1 errors and 30% Type 2 errors; the cost of a Type 1 error is 30 and the cost of a Type 2 error is 20. Therefore, the expected cost of a Type 1 error is 3 and the expected cost of a Type 2 error is 6, and the overall expected cost of error in this system amounts to 9.

Since a Type 2 error has a lower cost, the preference goes to this error. Therefore, the lowest expected cost of error would be achieved if there were no Type 1 errors, and all 40% of

erroneous decisions would bear a Type 2 error: the expected cost of error in such a system could be brought down to 8. No matter how small the difference in costs, it is always better to increase the probability of that error, whose cost is lower. To put it differently, the higher the percentage of the preferred error at the detriment of the other type, the lower the expected cost of error in enforcement.

Consequently, if in State aid law there was a preference for Phase 1 false negatives, then issuing the majority of positive decisions in the preliminary examination would be commendable as it would allow to lower the expected cost of error. This is because it would avoid opening of formal investigations that may lead to the more costly Type 1 error and that involve higher procedural costs if the final decision would anyway be positive. This conclusion is not surprising.

4.1.2. Preference for error under changing probabilities

If probability with which each type of error occurs was the same, one would decide on preference based solely on the costs of error, just like in the example above. Accordingly, the cheapest error would the most probably be the Phase 1 Type 2 error. However, that conclusion might change if the probability with which different types of error varies. Indeed, in order to identify the preference, one should employ the same approach as the one mentioned already several times in this thesis, namely the expected cost of error, i.e. cost of error multiplied by its probability. Clearly, if the probability is low, it may offset even a high cost, while if the probability is high, the low cost may in fact become very harmful, because it will be borne many times. The importance of probability in error-preference analysis was already hinted at in the literature: it may not be simply assumed that the risk of both errors is uniform, and that errors are equal in probability. Hence, the analysis shall rely, in the first place, on determination of frequency with which both types of errors actually occur in enforcement.[82]

It is, naturally, an abstract exercise to measure probabilities of errors, multiply them by cost and compare to each other, as no data is available. However, the conclusions drawn up to now in this thesis allow to reflect on whether the probability of error may vary according to the type of error, and subsequently, on whether it is possible that a cheap Phase 1 Type 2 error loses its status of preferable error because it may occur too often.

[82] Devlin and Jacobs (n 14) 79–80.

In light of considerations on the risk of error at the two State aid procedural stages, it may be recalled that the probability of error under current (rather complex) State aid rules is higher in the preliminary examination than under the formal investigation. This problem could be eliminated by adapting the assessment rule to the available resources and the function of each stage, but it currently does not seem to be the case. Consequently, Phase 1 decisions are related to a higher risk of error, but the cost of those errors is lower. Conversely, the probability of error is lower in Phase 2, but it could result in more costly errors. Clearly, one is under the risk of the situation outlined above: if Type 2 Phase 1 errors occur to often, their expected cost may potentially exceed the expected cost of the more expensive but rarer Type 1 errors or Phase 2 Type 2 errors.

In order to demonstrate that risk, let us consider again the imaginary system, in which the cost of a Type 1 error is 30, and the cost of a Type 2 Phase 1 error is 20. If this was the case in State aid, an erroneous decision not to raise objections would cost 20. Let us further imagine that the probability with which a Type 2 error occurs in the preliminary examination is 20%, which gives the expected cost of a Phase 1 error of 4. However, the quality of the investigation in Phase 2 is better – let us suppose that the probability of error in the formal investigation amounts to 10%. At this procedural stage, the Commission may commit either a Type 1 or a Type 2 error. Even if all errors committed by the Commission were the more costly Type 1 errors, the resulting expected cost of error would be only 3. Therefore, committing the more costly error in the formal investigation would be cheaper than adopting a less costly error in the preliminary examination. Hence, the expected cost of error, which is the only relevant when seeking for a preference, would yield conclusions different than those obtained solely from the cost seen in abstract.

It goes without saying that one ignores the exact probabilities of error. However, a quick reflection shows that it may not be excluded that Phase 2 errors become preferable to Phase 1 ones, if the latter occur sufficiently more often than the former.

4.2. The changing cost of error

It has been concluded so far that the preference for Phase 1 Type 2 errors may be threatened by a high probability, with which those errors may occur. In this section, it will be reflected on whether not only the probability, but also the cots itself may change over time. If the cost changes as the error becomes more frequent, that could further undermine the initially drawn

preference. Indeed, due to the current design of State aid law, Phase 1 errors have a relatively high chance of occurring. In addition, as mentioned in Chapter 1, if over 90% of State aid enforcement consists in Phase 1 decisions not to raise objections, the simple fact that those decisions are more numerous entails that errors occur more often, even if probability of error was the same at both procedural stages. Since Phase 1 errors are more frequent, their costs have, in fact, a better chance to change.

4.2.1. Can the cost of error change as the number of errors increases?

Section 3 on the preference for an error teaches us how to err for the first time: in a world of no errors, when the first one has to be made, the preference for Phase 1 errors applies. However, if today the Commission decides to adopt such a preference, the problem would be that there already exists a certain number of State aid errors, which were made in the past. To put it differently, the costs of error were up to now analysed in abstract, as if an error appeared in a vacuum. Nevertheless, if a Type 2 error is now committed, its costs will have to be added to the costs of previously committed Type 2 errors. Accordingly, the question arises whether costs of errors of the same kind are always equal, independently of their number, or whether they grow/fall as they multiply. If that is the case, then any preference should be drawn very cautiously, as it may change over time. It is important to reflect on that issue, since there is and will always be some amount of error, more than one.

The issue of an error cost changing over time is not addressed in the traditional discussion on error preference. As a result, it may offer an attractive solution (Type 2 errors preferable to Type 1 ones), but it is not satisfying whenever one type of error is more common that the other. Indeed, what ultimately counts is "the total social cost of all errors," which varies according to the changing number of errors made. Indeed, if for each Type 2 error ten Type 1 errors are made, the social calculus may change as compared to the case of equal number of errors.[83]
Accordingly, a disqualifying problem pointed out by the critics of the antitrust preference for false acquittals is to assume that the cost of a type of error is constant. More specifically, it is wrong to simplistically assume both Type 1 and Type 2 errors are equal in magnitude and probability. Consequently, the analysis shall rely, first, on determination of frequency with which both types of errors actually occur (this has been discussed in the section above) and then, the severity of error must be looked at from the perspective of its temporal range.[84]

[83] Mentioning this argument: ibid 97–98.
[84] ibid 79–80.

In order to see where that reasoning is going, one may consider the following situation: out of 10 erroneous decisions, 8 are Type 2 and 2 are Type 1 errors. The question is that of whether the cost of the first Type 2 error may be the same as the cost of the third, sixth and eighth one. Indeed, even if one could precisely define the cost of a false positive and the cost of a false negative, it is unlikely that the final cost of several errors would be the cost of an individual error multiplied by their number. Indeed, in this situation 1+1 may give a number different than 2. Therefore, it is imaginable that the cost of an umpteenth Type 2 error increases to the point that it exceeds the cost of one of the first Type 1 errors. At such a point, it would be preferable to have one more false positive instead of another false negative, which upsets the initial distinction between the cheaper and the more expensive error, as well as the conclusion on the preference.

Naturally, since costs of errors as such may not be measured (in particular because no one knows exactly which decisions are erroneous), there is no proof in favour of a constant or changing cost of error. However, taking into account that the authors traditionally do not contradict a changing cost, but simply omit it in their analyses, as well as that a changing cost appears difficult to reject, one may try to apply it to the costs of State aid errors.

In order to outline how the costs of a State aid error might change, one may analyse how the three costs described in the previous sections could react to an increase in the number of errors, if indeed they were suspected to increase/decrease over time. The first cost is the cost of the erroneously admitted measure on the market, the second pertains to impact on the States' behaviour, and the last one is the procedural cost.

4.2.2. More errors on the market

The magnitude of the harm or the lost benefit of aid is an individual question and thus the cost will vary from one measure to another. However, it may be suspected that if the second, third and the following harmful aid is admitted on the same market, when their harmful effects cumulate, new aid that aggravates distortions caused by previous measures may result in a higher final harm.

An example of cumulation and amplification of harmful effects of Type 2 errors is brought in the area of start-up acquisitions, where the mass approval of such acquisition is criticised as increasing error costs. Namely, if Type 2 errors are usually preferred because market entry is supposed to counter the anticompetitive behaviour, the very essence of start-up acquisitions is

that the market entrant is acquired so that it may not fulfil that role. This problem does not occur when acquisitions are rare, but only when start-up acquisition is unrestricted and innovative start-ups are consistently swallowed by bigger market participants. The accumulation of effects of individually harmless acquisitions has been confirmed by empirical research.[85]

In addition, the suggestion that error costs may grow with the time may be deduced from the general analysis of state aid, although not dealing specifically with the error framework. Indeed, whenever it is mentioned below that aid has a specific negative effect, one may assume that such aid was granted following an error.

For instance, aid may lead to raising entry barriers, while the existence of entry barriers is related to higher harm.[86] Hence, an aid granted on a market foreclosed due to previous aid may have higher cost than the one granted before barriers were raised. Furthermore, it is acknowledged that aid granted to large market players may more significantly affect trading conditions than aid to insignificant ones.[87] In fact, repeated aid to the same recipient may welcome it as a moderate operator, but make out of it a significant one, so that when this undertaking obtains aid when it already holds an important degree of control over the market, the harm may be higher than when it received aid being still relatively small. When the aid beneficiary becomes the only one able to purchase small rivals and accede to their assets, such aid may prevent a more balanced distribution of assets,[88] which was not at stake at the beginning. Similarly, since measures that cover many companies operating on the same market may affect competition more than aid to only one company,[89] repeated aid to more and more market operators may also gradually increase its harm. In the same vein, aid granted on a rolling basis is generally considered to be more harmful than one-time aid.[90]

Hence, it may not be excluded that the cost of error grows as the number of erroneous decisions on the same market increases. Of course, the Commission may notice the distortions on the market once the effects of harmful aid become observable, and may take them into account the next time it assesses a measure. On the other hand, the chance for identifying such a situation is impaired by the lack of necessity to delineate the relevant market in each case.

[85] Hovenkamp and Bryan (n 68) 339–346.
[86] Friederiszick, Roller and Verouden (n 7) 655, as well as Commission's guidelines themselves, e.g. RDI Framework, para 114.
[87] ibid 653, 656; Oxera (n 11) vi.
[88] Spector (n 7) 185.
[89] Oxera (n 11) vi.
[90] ibid.

4.2.3. Aggregate effect of errors on the States' behaviour

The number of errors may have an impact also on the States' incentives. This impact would pertain both to deterrence (for illegal aid) and to the inducement effect (for notified aid). In fact, it is possible that error procures an effect on States' incentives only when it is sufficiently frequent. Indeed, while one error is unlikely to alter a State's behaviour, that effect may be activated if the number of errors is sufficiently significant.

A) Impact on the States' decisions to grant illegal aid

As mentioned above, errors alter marginal costs and benefits of actions. Hence, a State will decide to undertake an undesirable action if the probability the Commission erroneously allows an operating aid or does not discover an illegal aid is sufficiently high. When this probability reaches certain threshold, it will become more beneficial (in terms of the expected benefit) for the State to grant illegal aid than to act in a desirable way. Therefore, with more Type 2 errors in investigations on illegal aid, and thus a higher probability of error, the States feel safe to undertake undesirable actions, so that the cost of error increases.

However, this cost will not grow indefinitely. Indeed, let us suppose that a State will purposefully design and notify a harmful measure if there is a 50% chance that such a harmful aid will be approved by the Commission. Therefore, once the probability of the Commission's error reaches 50%, the State's decision is made. Whether the probability in fact amounts to 50, 60 or 80% does not matter for the State. Hence, every subsequent error will not always have a cost higher than its predecessor. Of course, the thresholds must differ from one State to another (depending on their aversity to risk and the ability to observe errors) and from one aid to another (depending on the benefit the State is multiplying by the probability). However, it may be agreed that the cost of error grows, passing different States' thresholds, until it reaches the highest threshold, which alters the last State's behaviour. After this point, the cost will fall, because errors will not influence any State's behaviour anymore.

The scheme is similar in the case of false convictions, which have the effect of discouraging the States from granting beneficial aid (because they may be erroneously prohibited), or even encouraging them to grant harmful aid (because the aid may be prohibited independently of whether it is good or bad). When the probability of error reaches a certain threshold, the change in a State's incentives is accomplished and it switches to undesirable behaviour. The cost of error will grow to the point at which it alters the choice of the last State, after which it will start to decline, since additional errors are no longer relevant for the States' incentives.

B) Impact on the inducement effect

The above reasoning may be, to a certain degree, extended to the inducement effect, which may be supported by errors: the cost will be replaced by the benefit of contributing to the inducement effect. Because the States base their decision as to which aid to grant on the expected benefit of aid, the probability of successful implementation needs to reach a certain threshold, and errors may help in driving this probability up. Once again, more errors translate into higher probability, and the marginal benefit of error will grow up to the critical point.

The same reasoning may be applied to explain the impact of Type 1 errors, whose benefit is to discourage the States from granting a particular type of aid. This benefit will grow with the number of errors inasmuch as it allows to lower the probability of success and change the incentives. When this objective is reached by false acquittals in one area and at the same time false convictions in another, the marginal benefits of the two errors will be linked to each other and evolve together.

To sum up, errors that impact the States' incentives generally are more powerful when they are more numerous. Therefore, the cost of errors that have a negative effect on incentives will increase over time, while errors with positive impact bring higher benefits as their number increases. Nevertheless, this decrease in the cost of error will continue only up to a certain point, at which all incentives have been changed and the error-rate becomes neutral to the States' decisions.

In addition, the cost of a false positive does not have to change with the same pace as the cost of a false negative. In fact, Type 1 errors, in particular when they entail a recovery order, benefit from a much bigger publicity than Type 2 errors. Of course, this phenomenon concerns not the errors themselves, but correct and erroneous negative decisions, which unlike positive ones naturally attract attention and make on the States a bigger impression. That way, one well-known case may distort perception of probability of success and scare some States off. Positive decisions, whether on legal or illegal aid, are not of such interest, and do not benefit from the same advertising. Thus, one Type 1 error may bring a cost (or a benefit) higher than several Type 2 errors put together, as well as it may reach the incentive-changing point and start falling earlier.

4.2.4. Costs of the procedure

It is difficult to identify a specific effect of errors on evolution of the procedural costs. Instead, it could be considered that the procedural costs may decrease as more decisions are adopted in such procedure, independently of whether those decisions are correct or erroneous. In such a case, an error would have a similar effect as Type 2 errors in producing the inducement effect: it would only strengthen the trend and reinforce or accelerate the result. These effects of an increase in the number of decisions will be briefly outlined below.

With more decisions of one type adopted within the framework of one procedure (e.g. decisions not to raise objections in the preliminary examination), Commission's agents become more skilful in handling similar cases. Thus, they become able to carry out assessment more smoothly, recognise potentially important issues with more precision, and use the time and resources more efficiently, so that adopting the decisions becomes less costly.

The decrease in procedural costs may be completed by a lower probability of error, if agents become more vigilant and spot inconsistencies with greater ease. On the other hand, routine in adopting one type of decision might lead to low-quality procedure, the 'snowball effect' or path dependence (many decisions of one type leading to even more decisions of the same type). This issue has been approached in Chapter 2 and the conclusion relevant for this section is that procedural costs may be reasonably expected to fall as agents become more and more familiar with the procedure and different types of cases.

4.2.5. A changing cost that alters the initial preference between errors

It has been found in Section 3 of this Chapter that in State aid enforcement, Type 2 errors might be preferable to Type 1 ones. This conclusion is similar to that commonly followed in antitrust, but in State aid it has been reached through a different reasoning. However, it has been subsequently suggested that while preference is determined on the basis of the probability of error multiplied by its cost, both these values may vary depending on the type and number of errors. These considerations are important because they may undermine the initial preference, but at the same time, they entail some vagueness due to impossibility to measure values.

If it was observed that the preference goes to the Phase 1 Type 2 error, but that its expected cost may grow due to high probability and increasing cost, one may try to identify how this change of preference could take place.

Three scenarios may be imagined, according to which at the starting point, the cost of both errors is the same (Scenario 1), that the cost of a Type 2 error is higher (Scenario 2) and finally, that the cost of a Type 1 error is higher (Scenario 3). These scenarios serve to demonstrate that

whatever the initial expected cost of errors, a higher probability accompanied by an increasing cost will always reverse the initial preference after some time.
The assumption will be that the cost of any type of error increases over time, ie. with the number of erroneous decisions taken. For simplicity, only two errors will be taken into account: the cheapest Phase 1 Type 2 error and the costliest Type 1 error, and it will be assumed that the costs of both types of error grow in the same manner. It will further be assumed, based on the previous analysis, that under the current rules, Type 2 errors are more common than Type 1 ones. Under these assumptions, the cost of a Type 2 error will always eventually exceed the cost of a Type 1 one.

The first scenario is that under which the initial expected cost of error is the same under Type 1 and Type 2 errors. Assuming that the probability of error is constant, and the cost of error grows, Type 2 errors are more costly whenever they are more numerous than Type 1 ones. In this case, under the current State aid setting, each new Type 2 error would be more costly than a Type 1 one.

Under the second scenario, the initial expected cost of error is higher for Type 2 errors than for Type 1 ones. In this case, the increasing cost would further increase the difference between the costs, so that the more frequent Type 2 error gets more and more expensive as compared to the Type 1 one.

Finally, under the third scenario the expected cost of a Type 2 error is initially lower than that of a Type 1 error. In this case, more frequent Type 2 errors would mean than the cost of the latter increases and gets close to the expected cost of a Type 1 error, which is less frequent and whose cost is thus lower. At certain point, the cost will reach the point at which the expected cost of a Type 2 error equals the expected cost of a Type 1 error, and beyond which Type 1 error brings lower cost. Under such circumstances, the quantity of errors and the related cost may effectively reverse the initial preference.

Hence, even if the cost of a Type 2 error was initially identified as the lowest one, a more frequently occurring Type 2 error will at some point start to engender higher costs than a Type 1 error. Consequently, it is impossible to identify with certainty the error whose commitment by the Commission in the next decision would bring lower costs. Indeed, it may well be that already today, Type 1 errors are preferable to Type 2 ones, even if in the past Type 2 errors

were cheaper – one does not know in which point of the third scenario the error cost currently finds itself. Naturally, the higher the difference in the initial cost and the lower the difference in the probability of error, the slower that process would be.

Concluding that the high probability of error may lead to a dangerous increase in the error cost so that it is no longer preferable, it will be suggested in the next section that lowering the probability is the solution to the conundrum and to the horrible uncertainty this chapter identified.

4.3.Lowering the expected cost of error – a lower probability for a lower cost

Ideally, the project of lowering the expected cost of error should relate the considerations presented in this chapter to those resulting from the previous one. The law-maker should choose the standard (found somewhere between simple and complex rules), which guarantees the lowest expected cost of error. For that purpose, he would have to identify the probability of each type of error under each standard and multiply it by the cost of the corresponding type of error. The lowest expected cost obtained would point at the most desirable standard.[91] However, due to the unavoidable inaccuracy in assigning value to any of the variables, such an exercise may not be carried out in practice.[92]

To put it differently, a State aid system aware of errors would, on a temporary basis, endeavour an analysis of whether in the light of current probabilities and the number of errors, the preference for Phase 1 Type 2 error is still valid. If such a challenge was to be taken in State aid law, one would certainly need an analysis of the risks of error at different procedural stages as well as a report from the Court of Auditors on how often errors in the Commission's State aid evaluation happen. This would be a large and costly project that could not, at the end, yield comprehensive and free from uncertainty results.

Therefore, a relatively easy in application and a reliable solution is to follow the recommendations made in Chapter 2 of this thesis, targeting the probability. Indeed, if the assessment criteria were simplified to fit the procedural limits of the preliminary examination, the risk of error under Phase 1 and Phase 2 has no reason to differ significantly. It is because the probability lies at the basis of the complications identified in Section 4. If the probability and the number of errors are not disproportionate, then even if the cost of error changes with the time, neither the cost of Phase 1 error or the cost of a Phase 2 error could grow much faster

[91] According to Hylton, Heith in Devlin and Jacobs (n 14).
[92] ibid 95.

than the other. If not eliminated, the difficulty could be importantly reduced, so that a preference could hold in State aid assessment for a Phase 1 Type 2 error.

Naturally, as mentioned in Chapter 2, the discussion on the expected cost of decisional errors is complexified by the variety of aid instruments and sectors, to which may be granted by the State. Indeed, depending on the type of aid – environmental, restructuring, regional or other – costs and probabilities are different, and would lead to different conclusions. For instance, it was pointed out that difficulties in proper assessment of antitrust practices in highly competitive markets may drive the probability, and thus the expected cost of error, up.[93] Accordingly, "one-size-fits-all error rules are unlikely to yield optimal enforcement."[94] The optimal analysis would thus consist in elaborating individual standards (and different preferences), which are optimal for specific types of aid. This thesis does not endeavour to set those standards but limits itself to pointing at particularities of State aid control that would need to be taken into account if such area-specific analysis is carried out in the future.

4.4. Conclusion

This section referred to the finding that a Phase 1 Type 2 error would be the cheapest State aid error and thus, preferred in State aid enforcement. It indicated that identifying a reliable preference is a complex task, which needs to take account the probability of error (translating into their number) and the possibility that the cost of error changes as errors of the same kind become more and more frequent. These findings should be particularly alerting in State aid procedure, since it was observed that the risk of error under current State aid rules may be higher in the preliminary examination than in the formal investigation, while most decisions are in fact issued in Phase 1. The number of Phase 1 errors may, therefore, be higher than the number of Phase 2 ones.

It is possible that the cost of error changes depending on the number of errors. For example, the cost of an erroneous decision not to raise objections increases with the time because of the amplified harm, but it decreases as it contributes to the inducement effect. Then again, its procedural cost may decrease as it becomes the most popular decision to adopt. At the same time, lower procedural cost may occur together with either a decrease or an increase in the probability of error. Therefore, taking into account the probability and the potentially changing cost leads to the conclusion that the concept of preference for a type of error is extremely abstract, and particularly difficult to apply to a framework such as State aid.

[93] Ahlborn and others (n 1) 21.
[94] Devlin and Jacobs (n 14) 80.

The solution to that problem is not straightforward, because measurement of costs of error and of their probability is unfeasible. The most effective answer to the chaos and uncertainty brought by the costs of error is therefore to tackle the source of complications, e.g. the probability of error. Were the rules designed in such a way that they ensure accuracy both in Phase 1 and in Phase 2, the costs could not derive much, or would derive in a slower pace, from the initial situation, under which a preference may still be identified. If probability is dealt with, then the preference for Phase 1 Type 2 errors could be maintained.

5. Conclusion

This chapter aimed to demonstrate that an error brings different types of cost, such as effects on the market, impact on Member States' incentives and procedural costs, the comparing of which may lead to establishing a preference for an error. Similarly to the antitrust literature, although on the basis of a different, State-aid-oriented, reasoning, Type 2 errors (more specifically, an erroneous Phase 1 decision that a measure does not constitute aid) were considered to be cheaper than Type 1 ones. The problem is that if different types of errors occur with different probabilities, and if their cost might change depending on the number of errors, the expected cost of error motivating the preference may significantly change. Adding measurement obstacles, it becomes practically impossible to determine the desirable error to commit in the situation of uncertainty.

This puzzle only emphasises the importance of findings drawn in Chapter 2. The disproportion in probabilities of error under Phase 1 and Phase 2 of the State aid procedure must be eliminated. As it was mentioned in that chapter, this would allow to limit the number of errors, which in itself is a valid goal. The present chapter on costs adds to the lower probability another value, namely that of legitimising determination of a preference in State aid enforcement. Indeed, if the probability of a Phase 1 error did not differ significantly from the probability of a Phase 2 error, Phase 1 Type 2 errors could be considered as the preferred error. In such a case, in the situation of uncertainty, the Commission could err on their side, thus lowering the cost suffered from mistake. Therefore, the probability is the key to lowering the expected cost of error in State aid assessment.

Once the probability and the cost of error have been analysed, one element of the discussion on errors in Commission's decisions is now missing. Indeed, the costs of errors, just like the

probability of errors, may be reduced by means of *ex post* control. The character and scope of this control, with its shortcomings and potential, as well as the addition it makes to the considerations developed in the previous chapters will the analysed in Chapter 4.

Chapter IV Error correction

1. Introduction

Until now, this thesis approached State aid enforcement by the Commission with the aim to identify the components of the expected cost of error (the probability of error multiplied by its cost), and ideally to offer solutions to lower the latter. In that context, it was considered that due to the risk of Type 2 errors, two sets of assessment rules with a different degree of complexity (one for the preliminary examination and one for the formal investigation) should be identified, and that for that purpose, the Commission should clarify and harmonise the scope of assessment in the preliminary examination. Then, the error-cost analysis demonstrated that although Type 2 errors might in fact have some positive effects on State aid policy, the relationship between the probability of error at different procedural stages and the potentially changing cost of error prevents one from stating firmly which error will always be the cheapest. This conclusion only emphasises the importance of identifying the appropriate assessment rule for each procedural stage, so that the probabilities of errors remain as close to each other (and naturally, as low) as possible.

The final element of the analysis is *ex post* correction of errors. Different mechanisms of such corrections will be discussed but certainly, a well-functioning action for annulment is of paramount importance. Indeed, if such a mechanism of detection and elimination of errors works smoothly, then the overall cost of error may be reduced: errors will be identified and corrected, and thus they will not entail costs, or these costs will be lower. Moreover, a well-functioning error correction mechanism may, simply because it exists, lead to an enhanced quality of decision-making and a decrease in the probability of error. Indeed, a higher probability of an effective review should incentivize the Commission to be more diligent in its analysis , inasmuch as a reliable judicial review constitutes a threat to decisions deviating from socially desirable standards.[1] Moulding the Commission's behaviour would be possible because it is in the latter's interest to avoid successful appeals against its decisions.[2] Therefore, a well-functioning ex post error correction system may contribute to a decrease in the expected cost of error, both at the level of reducing probability of error and through *ex post* correction in order to minimise the costs.

[1] Effects of the appeals process on adjudicator's behaviour were explained in: Steven Shavell, 'The Appeals Process and Adjudicator Incentives, Working Paper No. 10754' [2004] National Bureau of Economic Research 7–13.

[2] ibid 4; a more critical perspective on the impact of the appeals process on incentives was adopted in: Harlon Leigh Dalton, 'Taking the Right to Appeal (More or Less) Seriously' (1985) 95 Yale Law Journal 86–92.

It is important to disclaim that this chapter is designed to build on the three previous ones and therefore, its main focus is on correction of Type 2 errors, especially those made in Phase 1. Accordingly, it will grant more attention to competitors challenging positive decisions than to beneficiaries and States applying against negative ones. Still, findings concerning judicial review of the substance apply indifferently to Type 1 and to Type 2 errors, while admissibility constitutes, in any case, a less controversial issue for beneficiaries than for competitors.
One may think of several tools to address, *ex post,* errors in State aid assessment. There exist alternatives to the action for annulment, which might potentially allow the Court or the Commission itself to verify correctness of decisions. These different procedures will be described in Section 2. Having identified the action for annulment as the most comprehensive correction tool, Section 3 will analyse the action on the merits, and Section 4 the action based on the protection of procedural rights, in terms of their potential to eliminate errors. Conclusions and suggestions will be provided in Section 5.

2. A review of means for eliminating error in State aid decisions

Once an error in a Commission decision occurs, the question arises whether, and what kind of, mechanisms exist that would allow to detect and eliminate it. The most obvious way to challenge a decision is the action for annulment, by means of which an applicant may require the Court to review the legality of an act. However, the same applicant may also try to trigger judicial control indirectly, for instance through a reference for a preliminary ruling in a national proceeding concerning the approved State measure. It is also worth investigating the potential of tools applied by the Commission itself, namely revocation of decisions and *ex post* evaluation of measures. Finally, the natural overlap between State aid provisions and internal market law raises the question of whether a measure assessed on State aid grounds might constitute the object of a separate analysis under internal market law.

This section will briefly review these different options in order to find the most effective one, which will be further discussed in this chapter.

2.1.Action for annulment

The action for annulment is designed to allow the Union's judicial power to address possible incompatibility of acts of EU institutions with EU law. This internal error correction mechanism is the first tool to turn to when considering the possibility to remove decisional errors.

2.1.1. Action for annulment as laid down in Article 263 TFEU

According to Article 263 TFEU, acts of the Commission and other institutions may form the object of a review of legality. The article envisages four grounds for annulment: lack of competence, infringement of an essential procedural requirement, infringement of the Treaties or of any rule of law relating to their application, or misuse of powers. An action may be brought by privileged actors, who do not have to fulfil additional conditions: Member States, the European Parliament, the Council and the Commission,[3] semi-privileged actors: the Court of Auditors, by the European Central Bank and by the Committee of the Regions for the purpose of protecting their prerogatives,[4] and by non –privileged actors: any natural or legal person. The latter have *locus standi* only in three cases: against acts addressed to them, against acts which are of direct and individual concern to them, and against regulatory acts which are of direct concern to them and do not entail implementing measures.[5] The time limit for introducing an action for annulment is two months starting from the publication of the contested decision.

Quite obviously, actions against State aid decisions originate from actors negatively affected by the outcome of the assessment. Consequently, negative decisions are generally contested by the Member States concerned and/or the beneficiary undertakings, while positive decisions are attacked by competitors of the aid beneficiary. Naturally, a Member State could challenge another State's measure, but it virtually never occurs, probably because a Member State that attacks might find itself attacked in return in the future.

In line with Article 256(1) TFEU, the court competent to assess actions for annulment, including those against Commission's State aid decisions, is the General Court, whose decisions may be subject to a right of appeal to the Court of Justice. Whenever the action is well founded, the Court annuls the decision in its entirely or partially[6] and subsequently, the Commission must take "the necessary measures to comply with the judgment."[7] This compliance usually implies adopting a new decision, which takes on board the findings of the Court. In State aid, depending on the reason for annulment, the Commission may be obliged to open a formal investigation procedure or to reassess the measure on the substance. The Court is not competent to carry out, itself, a State aid assessment, so whether a negative or a positive

[3] Article 263(1) TFEU.
[4] Article 263(3) TFEU.
[5] Article 263(4) TFEU.
[6] Article 264 TFEU.
[7] Article 266 TFEU.

decision is quashed, the case goes back to the Commission and the measure is waiting again for an approval or prohibition. Interestingly, when a positive decision is annulled, and if the aid has already been granted on its basis, the aid becomes illegal, because the decision approving it does not exist anymore to the effect that the aid was granted before the Commission adopted a decision in its regard.

2.1.2. Two grounds for annulment

According to Article 263(4) TFEU, any natural person, such as an undertaking challenging a Commission's positive decision, needs to demonstrate that it is individually and directly concerned by the decision in question. This general set-up applies to every action brought by a competitor against the merits of a Commission decision and entails a strict admissibility assessment.

Nevertheless, and building on the two-stage character of the State aid procedure, it is possible to contest not only the Commission's finding on the substance but also the very fact of non-opening of a formal investigation. This specific object of annulment, referring to the procedural aspects of a decision and not to its merits, has been given special treatment, because the strict admissibility standard is not applied in such cases. Instead, the competitor needs solely to be an "interested party" in the sense of the Procedural Regulation, so that its standing becomes automatic. It is straightforward to realize how precious such a privilege to attack a Phase 1 decision appears in the context of previous considerations on the probability of error, even though the scope of this action is limited as compared to its fully-fledged counterpart. Both the importance and the details of this type of action will be explored in detail in Section 4 below.

Consequently, a competitor may engage the procedure laid down in Article 263(4) on two grounds: on incorrectness of the merits of a Commission's decision or on an erroneous non-opening of a formal investigation. Both procedures have different scope and may contribute differently to the decrease in the expected cost of error in State aid assessment.

The account needs to be taken of the existing literature on the action for annulment. State aid literature confirms that that action is disappointing, but the primary focus of the analysis is on private parties and on their right to effective judicial protection.[8] In the field of competition law

[8] José Luis Buendía Sierra, 'The Role of Competitors in State Aid Procedures' (2015) 14 European State Aid Law Quarterly; Leigh Hancher, Tom Ottervanger and Piet Jan Slot, *EU State Aids* (Sweet & Maxwell 2016) 1–027, 1–028; Paul Craig, *EU Administrative Law. Second Edition* (Oxford University Press 2012) 306, 330, 332; Michaël Karpenschif, *Droit Européen Des Aides d'État* (Bruylant 2015) 246; Valérie Fauré, 'L'apport Du

in general, the role of judicial review as a means of error correction is clearly related to problems that generalist judges face when they assess competition matters[9] and set the standard of review.[10] The administrative law literature also provides some useful insights into judicial review.[11] However, no conclusion emerges as to why and what kind of better access to justice would be beneficial in terms of effectiveness of State aid enforcement, especially in light of the two types of action for annulment the Court made available to the applicants. Indeed, the law and economics angle is not common, creating the gap that this chapter aims, at least partially, to fill. Hence, the most pertinent findings of the rich literature will be referred to in this chapter, as the basis for an analysis of an action for annulment specifically as a means of correction of errors in State aid decisions.

2.2.Indirect ways of attacking Commission's decisions

Applicants in the proceedings based on Article 263(4) repeatedly argue that there exists no other option than the action for annulment procedure by which they could effectively contest Commission State aid decisions.[12] Therefore, it should be examined whether Commission's decisions may in fact be attacked, and thus errors removed, differently than by means of a direct action. Three possibilities will be discussed: reference for a preliminary ruling, plea of illegality, and intervention in other cases.

2.2.1. Reference for a preliminary ruling

Reference for a preliminary ruling constitutes an indirect way to plead invalidity of a Commission decision.[13] Indeed, the General Court itself recognised that references for a preliminary ruling constitute a way for competitors to challenge decisions of national authorities

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Tribunal de Première Instance Des Communautés Européennes Au Droit Communautaire de La Concurrence' (Nouvelle Bibliothèque de Thèses 2005) 196; Georges Vandersanden, 'Pour Un Élargissement Du Droit Des Particuliers d'agir En Annulation Contre Des Actes Autres Que Les Décisions Qui Leur Sont Adressées' [1995] Cahiers de droit européen 535.

[9] Michael R Baye and Joshua D Wright, 'Is Antitrust Too Complicated for Generalist Judges? The Impact of Economic Complexity & Judicial Training on Appeals' (2010) 09–07 George Mason University Law and Economics Research Paper Series; Easterbrook (n 10), even though that analysis refers to the U.S. system, with courts acting in the first instance.

[10] Jenny Frédéric, 'Improving Judicial Control of Administrative Decisions in Competition Enforcement', *The role of the Court of Justice of the European Union in competition law cases* (Bruylant 2012); Massimo Merola, 'Substantive Standard of Judicial Control in State Aid Matters', *The role of the Court of Justice of the European Union in competition law cases* (Bruylant 2012); Mel Marquis and Roberto Cisotta (eds), *Litigation and Arbitration in Eu Competition Law* (Edward Elgar 2015); also in administrative law: Craig (n 13) 400–445.

[11] Carol Harlow and Richard Rawlings, *Law and Administration* (Cambridge University Press 2009); Craig (n 8).

[12] E.g. T-141/03, *Sniace* (2007) ECLI:EU:C:2007:700, para 62; C-10/95, *Asocarne* (1995) ECLI:EU:C:1995:406, para 21.

[13] C-50/00, *Unión de Pequeños Agricultores* (*UPA*) (2002) ECLI:EU:C:2002:462, para 40; see also Anthony Arnull, *The European Union and Its Court of Justice. Second Edition* (Oxford University Press 2007) 82.

to grant aid, as well as the Commission's decisions approving State measures.[14] This possibility, forming part of the "complete system of legal remedies and procedures designed to ensure judicial review of the legality of acts of the institutions"[15] ought to guarantee the respect of the right to effective judicial protection.[16] More importantly, it constitutes the main justification for the tight admissibility criteria in the action for annulment: competitors are refused *locus standi* because they may challenge decisions indirectly via a reference for a preliminary ruling.[17] Therefore, the Court seems to consider Article 267 not only as a standalone option for competitors to attack Commission's decisions, but it is also one of the reasons for which access to the action for annulment has been limited. Whether this option is real may be assessed in light of the shortcomings of the preliminary ruling set out below.

A) Shortcomings of the procedure laid down in Article 267

Nevertheless, Article 267 proves to be a poor substitute of Article 263.[18] First, it is possible that a procedure before the national court, which could potentially trigger a preliminary ruling, may not even take place. This is because issues pertaining to conditions for contesting State measures are a matter of national law and are not regulated at the EU level. Consequently, the situation in which domestic remedies are unavailable is imaginable and that situation would not be problematic from the perspective of EU law. Indeed, the Court considered that if it is not possible, according to the national law, to review the validity of an EU act, such a circumstance does not allow the Court to extend its jurisdiction under Article 263(4).[19] Similarly, for a preliminary ruling to be assessed by the Court of Justice, the problem of validity of a State aid decision may not be hypothetical, and it must bear some actual relation to the facts of the main action or its purpose.[20] In other words, competitors may not freely attack Commission decisions concerning them, but have to construct an entire proceeding at a national level, for which the question of validity of the decision becomes essential.

For instance, a question of validity of a positive decision may arise when aid is financed from money levied from other undertakings. Such an undertaking could refuse to pay the charge on the basis that the aid scheme is incompatible with the internal market, while the Commission's

[14] T-330/94, *Salt Union* (1996) ECLI:EU:T:1996:154, para 39.
[15] *UPA*, para 40.
[16] Joined cases C-587/13 P and C-588/13 P, *Banco Bilbao Vizcaya Argentaria* (2015) ECLI:EU:C:2015:18, para 49.
[17] *UPA*, para 40.
[18] Craig (n 8) 341–342.
[19] Joined cases T-172/98, T-175/98 to T-177/98, *Salamander* (2000) ECLI:EU:T:2000:168, paras 72-80.
[20] In particular C-415/93, *Bosman* (1995) ECLI:EU:C:1995:463, para 61.

positive decision contained errors that invalidate it. When a litigation for payment of the amount arises between the undertaking and the national authority, the case may go to the referring court and from there, up to the Court of Justice.[21]The case seems simpler as regards recovery decisions, since recovery is executed according to national procedures. Hence, a litigation may very simply arise, if the undertaking opposes the recovery by claiming that the Commission's negative decision was erroneous.[22]

Second, doubts expressed by a party before a national judge do not have to result in a reference for a preliminary ruling. Indeed, it is only the court against whose decisions there is no judicial remedy under national law that has obligation to seize the Court of Justice once the validity question is raised.[23] Moreover, the latter issue – whether a question is raised – is all the same complicated. Indeed, because Article 267 does not constitute a means of redress available to the parties to a case before a national court, the mere fact that a party brings the issue of validity does not mean that the court must consider a question to have been raised within the meaning of Article 267.[24] Hence, even though the court must refer the matter to the Court of Justice when it has doubts as to validity of an act,[25] it is the court, and not the party, that must encounter doubts. Additionally, even if the question eventually is submitted, it is up to the referring court to formulate it, and the parties "may not change their tenor."[26] Very recently the Court confirmed that whatever criticism the parties may have of the interpretation of law adopted by the referring court, the reference for a preliminary ruling must be examined only in the light of that court's interpretation.[27] Finally, the question may be reformulated by the Court itself,[28] which constitutes a double-edged sword, as reformulation may either go in the same direction as that aimed by the parties, or may further depart from their perception of the issue. In any case, the parties may not be sure that the validity question they raise will lead to a preliminary ruling, and they do not control the scope of the question.

Third, even if ultimately a reference for a preliminary ruling is made, it is uncertain that the

[21] Similar facts arose in the Régie Network case discussed in the section below.
[22] For instance in cases C-148/04, *Unicredito Italiano* (2005) ECLI:EU:C:2005:774; C-667/13, *Banco Privado Português and Massa Insolvente do Banco Privado Português* (2015) ECLI:EU:C:2015:151.
[23] Article 267(3) TFEU.
[24] C-344/04, *IATA and ELFAA* (2006) ECLI:EU:C:2006:10, para 28; C-283/81, *CILFIT* (1982) ECLI:EU:C:1982:335, para 9.
[25] Court of Justice of the European Union, *Reconmmandations to national courts and tribunals in relation to the initiation of preliminary ruling proceedings* (2012/C 338/01), para 7.
[26] C-44/65, *Singer* (1965) ECLI:EU:C:1965:122, at 970.
[27] C-627/18, *Nelson Antunes da Cunha* (2020) ECLI:EU:C:2020:321, paras 36-38.
[28] C-334/95, *Krüger v Hauptzollamt Hamburg-Jonas* (1997) ECLI:EU:C:1997:378**,** paras 22-23.

question will be answered by the Court. Indeed, although questions submitted by national courts enjoy a presumption of relevance,[29] the Court will refuse to address it if it is straightforward that the question bears no relation to the actual facts of the main action or its purpose, where the problem is hypothetical, or where the Court does not have before it the factual or legal material necessary to give a useful answer.[30] This limit proves to be relevant, as in several preliminary rulings pertaining to State aid decisions the Court refused to answer the question: the practice of this procedure in State aid law will be discussed below.

Finally, the procedure clearly has a different character and the Court's examination different scope as compared with the action for annulment. The Court is limited to the question asked by the referring court, and therefore the Court is not given the opportunity to fully investigate the matter, as it is the case in proceeding instituted through the action for annulment.[31] Naturally, the procedure has a non-contentious character, whereby the parties have no initiative and are merely invited to be heard.[32] In addition, the quality of the reference for a preliminary ruling suffers from the lack of participation of the Commission in the procedure, as well as from the lack of expertise of national judges in complex EU issues.[33]

It is important to observe that the Court of Justice acknowledges the shortcomings of the procedure under Article 267 but does not aim to act upon its limits. In particular, it considered that even if the reference for a preliminary ruling was less effective than the direct action for annulment, this would not allow the latter action to be declared admissible as long as the plaintiff does not satisfy the conditions from Article 263(4).[34]

B) The use of Article 267 in State aid cases

In practice, references for a preliminary ruling in the field of State aid consist mainly in questions on the interpretation of Articles 107 and 108. However, a few questions concerning validity of Commission's decisions have also been asked.[35] Generally, the Court of Justice

[29] C-300/01, *Salzmann* (2003) ECLI:EU:C:2003:283, paras 29-31.
[30] In particular C-415/93, *Bosman* (1995) ECLI:EU:C:1995:463, para 61.
[31] Opinion of AG Jacobs in case C-358/89, *Extramet Industrie* (1991) ECLI:EU:C:1991:144, para 73.
[32] C-44/65, *Singer* (1965) ECLI:EU:C:1965:122, at 971.
[33] Craig (n 8) 308.
[34] Joined cases T-172/98, T-175/98 to T-177/98, *Salamander* (2000) ECLI:EU:T:2000:168, para 75.
[35] C-148/04, *Unicredito Italiano* (2005) ECLI:EU:C:2005:774; C-667/13, *Banco Privado Português and Massa Insolvente do Banco Privado Português* (2015) ECLI:EU:C:2015:151; C-390/06, *Nuova Agricast* (2008) ECLI:EU:C:2008:224**;** C-333/07, *Régie Networks* (2008) ECLI:EU:C:2008:764; C-222/04, *Cassa di Risparmio di Firenze* (2006) ECLI:EU:C:2006:8; C-138/09, *Todaro Nunziatina & C.* (2010) ECLI:EU:C:2010:291.

either found a reason not to examine the question of validity due to its hypothetical character or no relation to the case,[36] or confirmed validity of the decisions.[37]

Nevertheless, in one case the Court considered a decision not to raise objections to be invalid. In that case, a French aid scheme provided for a parafiscal charge on certain companies for the benefit of small radio stations. That aid was approved by the Commission as it pursued public interest objectives. However, the applicant before the referring court, who had to pay the charge, took the national fiscal authority to the court to obtain reimbursement of the paid amount. Indeed, it considered that the statement of reasons in the Commission's decision was inadequate so that the latter was invalid and the aid was granted illegally. The Court of Justice concurred with the applicant, since the Commission indeed failed to analyse an important element of the aid scheme (the method by which the aid was financed), by which its assessment was 'necessarily vitiated by an error.'[38]

Therefore, although it is possible that a Commission's decision is declared invalid by the Court of Justice, the one and only example of such result is insufficient to consider the preliminary ruling as a working alternative for the action for annulment. First, the parties do not exercise control over the procedure, as it is ultimately up to the referring court to submit and formulate the question: this is the procedural aspect. Second, and on the substance, an appropriate claim must arise at the national level, for instance pursuant to an aid scheme financed by other market operators or a recovery decision. Hence, many aid measures, e.g. individual aid, would simply not qualify to contest the validity of the underlying decision.

2.2.2. Plea of illegality

Another way to contest a decision differently than by means of a direct action might be to rely on Article 277 TFEU. According to this article, a plea of illegality may be raised in a proceeding before the Court of Justice or the General Court in order to invoke the inapplicability of that act to the case in question. The plea may be raised on the same bases as those indicated in Article 263 TFEU even after the time-limit for bringing an action for annulment against the guidelines has expired.[39]

It is true that Article 277 pertains only to acts of general application, either regulations or acts

[36] C-222/04, *Cassa di Risparmio di Firenze;* C-138/09, *Todaro Nunziatina & C.*
[37] C-148/04, *Unicredito Italiano*, C-667/13, *Banco Privado Português and Massa Insolvente do Banco Privado Português.*
[38] C-333/07, *Régie Networks*, para 116.
[39] Article 277 TFEU.

that produce similar effects,[40] while Commission's individual State aid decisions do not fulfil this condition. Nevertheless, the Court has foreseen the possibility to contest a general act, on which the Commission based its decision, provided that the general measure is "applicable, directly or indirectly, to the issue with which the action is concerned" and that "there [is] a direct legal connection between the contested individual decision and the general measure in question."[41] Accordingly, in a proceeding against an individual decision, a party may indirectly challenge the validity of previous acts that form the legal basis of that decision, such as guidelines. That possibility was explicitly confirmed by the General Court, after it recognised that Commission's 1998 guidelines on regional aid laid down, in a general and abstract manner, the criteria that determined the way to assess the compatibility of aid in the contested decision.[42]

However, the plea of illegality against guidelines has an obvious shortcoming that it must concern an assessment rule contained in guidelines, but not the assessment itself. Therefore, it might constitute a tool against errors in acts of soft law but not against errors in Commission decisions, and so it does not allow to address the issue discussed in this thesis. In addition, it is a limited solution even against the guidelines themselves, because if the plea is upheld, the contested decision would be declared illegal and annulled, but this finding would not have an *erga omnes* effect. Therefore, it would leave the guidelines in the legal order without affecting the legality of other decisions adopted pursuant to them, if those decisions were not challenged within the two-month period.[43]

Moreover, even in such a case the applicant would have to demonstrate that the Commission's decision is of direct and individual concern to him, because an act of soft law may be challenged only within the framework of an (admissible) action for annulment against the decision based on such an act.[44] This requirements which sends us back to the problem of the legal standing in the action for annulment, which will be discussed in the following sections of this chapter.

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[40] C-92/78, *Simmenthal* (1979) ECLI:EU:C:1979:53, para 40.
[41] Joined cases T-394/08, T-408/08, T-453/08 et T-454/08, *Regione autonoma della Sardegna e.a.*, (2011) ECLI:EU:T:2011:493, paras 206, 208-210; C-21/64, *Macchiorlati Dalmas e Figli* v *High Authority* (1965) ECLI:EU:C:1965:30, at 187 and 188; C-32/65, *Italy* v *Council and Commission* (1966) ECLI:EU:C:1966:42, at 409.
[42] Joined cases T-394/08, T-408/08, T-453/08 et T-454/08, *Regione autonoma della Sardegna e.a.*, paras 206, 208-210.
[43] E.g. T-286/15, *KF v CSUE* (2018) ECLI:EU:T:2018:718, para 157.
[44] C-92/78, *Simmenthal*, para 39.

2.2.3. Intervention rights

Finally, arguments against a Commission's decision might be raised at the occasion of a different proceeding, in the form of intervention. However, intervention rights of competitors are limited, as they may be used only within the framework of a case between natural or legal persons (intervention in cases between Member States, EU institutions and between Member States and institutions is impossible), in order to support the form of order sought by one of the parties.[45] It would also have to be established that the undertaking has a direct, existing interest in the result of the case, in particular that it is directly affected by the contested act.[46] Generally, interventions in cases against State aid decisions are not rare and are almost a routine in proceedings against negative decisions. It is, indeed, often either the State that supports the action of the aid beneficiary or the other way around,[47] or even that both support the Commission whose decision is attacked by a competitor.[48]

The problem consists in the fact that only competitors, as in the case of the action for annulment, would be interested in interventions against positive decisions. However, the issue of strict interpretation of Article 263(4) further impacts the possibility of intervention: in order for a competitor to intervene, another competitor must first be individually concerned by the decision in the main proceeding, so that the action is not rejected as inadmissible. This means that whatever the discussion on the action for annulment in Sections 3 and 4, its conclusions determine the usefulness of intervention rights of competitors.

2.3.Revocation of a decision by the Commission

Beyond correction of errors by the Court, the Commission itself may cancel and replace an erroneous decision by way of revocation. Indeed, Article 11 of the Procedural Regulation as well as general principles of law foresee the possibility to revoke a decision when this was based on incorrect information.[49] This possibility has been, although to a limited extent, discussed by the Court and very rarely used by the Commission.

[45] Statute of the Court of Justice of the European Union, Article 40(2) and (4).
[46] T-138/98, *ACAV e.a.* (2000) ECLI:EU:T:2000:45, paras 13-14.
[47] See e.g. T-747/15, *EDF v Commission* (2018) ECLI:EU:T:2018:6; T-818/14, *BSCA v Commission* (2018) ECLI:EU:T:2018:33; T-440/07, *Huta Buczek v Commission* (2010) ECLI:EU:T:2010:346; T-1/08, *Buczek Automotive v Commission* (2011) ECLI:EU:T:2011:216.
[48] See e.g. T-894/16, *Air France v Commission* (2019) ECLI:EU:T:2019:508.
[49] See the case-law below.

2.3.1. Two bases for revocation

The possibility to revoke a decision by the Commission is laid down in the Procedural Regulation, as well as is supported by a general principle of law. Both have different scope, complement each other, and examples may be found in the Commission's, although scarce, practice.

The main part of Article 11 of the Regulation reads as follows: "The Commission may revoke a decision taken pursuant to Article 4(2) or (3), or Article 9(2), (3) or (4), after having given the Member State concerned the opportunity to submit its comments, where the decision was based on incorrect information provided during the procedure which was a determining factor for the decision." This provision allows to revoke a decision that the measure does not constitute aid (adopted either in Phase 1 or Phase 2), a decision not to raise objections, a positive Phase 2 decision, or a conditional decision. Therefore, revocation of a negative decision is not possible. Revocation and adoption of a new decision must always be preceded by re-opening of a formal investigation.[50]

The Procedural Regulation or the Manual of Procedures do not contain detailed provisions on revocation. However, the case-law sheds some light on this tool. For instance, the Court judged that an action for annulment against a decision not to open a formal investigation may not be interpreted as directed against a refusal to initiate the revocation procedure.[51] In that case, the applicant requested the opening of a formal investigation on the basis of protection of his procedural rights and used revocation only as an alternative interpretation of its action, in the case the former is rejected. Hence, it seems that the applicant could potentially trigger revocation, but he would need to formulate its pleas explicitly by reference to Article 11 and argue that the decision was based on incorrect information. In other words, the applicant needs to make his mind on whether he relies on the procedural rights or on revocation, and it may not kill two birds with one stone.

The mandatory choice between the two bases for an action is linked to the fact that a formal investigation opened as part of a revocation procedure differs from a regular formal investigation. More specifically, an analysis preceding a possible revocation is limited to establishing the facts, while a fully-fledged formal investigation has a broader scope and

[50] Procedural Regulation, Article 11 *in fine.*
[51] T-222/00, *Otto Wöhr v Commission* (2001) ECLI:EU:T:2001:274, paras 43-46.

involves also the analysis of legal situation.[52] In a different case, the Court rejected the applicant's suggestion that Article 11 could be used by the Commission to adopt a decision approving an alteration of an already authorised and granted aid. Indeed, such an interpretation would be too broad and manifestly *contra legem* with respect to that provision.[53]

When referring to revocation as manifestation of a general principle of law, the Court considered its scope to cover situations not explicitly mentioned in Article 11. More specifically, it held that revocation is "merely a specific expression of the general principle of law according to which retrospective withdrawal of an unlawful administrative act which has created subjective rights is permissible, in particular if the administrative act at issue was adopted on the basis of false or incomplete information provided by the party concerned."[54] It added that "the right to withdraw retroactively an unlawful administrative act which has created subjective rights is not, however, limited to that situation alone, since such a withdrawal may always be carried out provided that the institution which adopted the act complies with the conditions relating to reasonable time-limits and the legitimate expectations of beneficiaries of the act who have been entitled to rely on its lawfulness.[55]" Consequently, revocation is not limited to the letter of the Procedural Regulation and, it seems, it could be used in a number of other situations, although not specified by the Court.

Differences between the two bases for revocation are further emphasised in the case-law of the Court. Indeed, in *Kronoply,* the Court underlined a restrictive reading of Article 11 (then 9): "the sole aim of that provision is to confer on the Commission power to revoke its decisions and that [...] provision applies only where incorrect information has been sent to the Commission and where, on the basis of that information, the Commission has adopted a decision finding that there is no aid or declaring aid to be compatible with the common market[56]" [emphasis added]. However, in other cases the Court was less strict, by claiming that "according to the law of all the Member States, retroactive withdrawal is generally accepted in cases in which the administrative measure in question has been adopted on the basis of false or incomplete information...[57]" [emphasis added] This suggests that when the Commission refers

[52] ibid, para 45.
[53] T-162/06, *Kronoply* (2009) ECLI:EU:T:2009:2, para 41.
[54] T-25/04, *González y Díez* (2007) ECLI:EU:T:2007:257, para 97.
[55] ibid.
[56] T-162/06, *Kronoply*, para 39.
[57] Joined cases C-42/59 and 49/59, *S.N.U.P.A.T. v High Authority* (1961) ECLI:EU:C:1961:5, para 87.

to the general principle of law, a decision may be revoked also when information was incomplete, not only false.

2.3.2. Practical use of revocation

As shown by the statistics, revocation of Commission's decisions is a very rare practice. Indeed, since 30th August 2008 only 3 revocations have taken place, the last one in 2011. In the first decision, the incorrect information, on which the Commission based its decision, was an invalid restructuring plan, but in the new decision the Commission again considered the measure to be compatible with the internal market.[58] In the second decision, revocation resulted from the annulment by the Court of a decision in a different case, in which the Commission's reasoning was incorrect. Knowing that the reasoning was contested by the Court, the Commission revoked also another decision, in which it carried out assessment on the basis of similar elements.[59] This revocation procedure, called by the Commission a 'withdrawal' and concerning a negative decision, looks like an example of application of the general principle of law rather than revocation based on Article 11 of the Procedural Regulation (in fact, the Commission did not indicate the legal basis for the withdrawal). In the third case, the Commission revoked a decision pertaining to aid to a bank related to financial crisis. The Member State committed to amend the measure, by which it removed doubts contained in the original decision,[60] while these commitments were considered by the Commission to constitute 'new information'.
Interestingly, in the *Lintra* case, Germany argued that the decision should be revoked because it had not provided the Commission with complete and correct information. However, and although the Commission recognised that it disposed of "partly incorrect information at the time of its decision," it assessed that information "would not have been a determining factor" in the assessment, so that there was no reason to revoke the decision.[61]

In theory, revocation could constitute a promising tool, since it is aimed at correction of positive decisions. If it was possible to revoke a decision and reopen the procedure in cases in which the facts were not properly established, an increased use of this tool could contribute to elimination of errors. Furthermore, the Court ruled that if the Commission withdraws a decision not to open

[58] Commission decision 2010/174/EC of 10 March 2009 on the State aids C 43/07 (ex N 64/07) and C 44/05 (ex NN 79/05, ex N 439/04) granted by Poland to Huta Stalowa Wola SA, in particular para 95.
[59] Commission decision 2015/1321 of 23 June 2010 on State aid C 38/07 (ex NN 45/07) implemented by France for Arbel Fauvet Rail SA.
[60] Commission decision of 17 November 2009 on State Aid N 627/2009 granted by the Netherlands.
[61] Commission decision 2001/673/EC of 28 March 2001on State aid implemented by Germany for EFBE Verwaltungs GmbH & Co. Management KG, paras 25 and 47.

a formal investigation after it examines a complaint, it may not simply reopen the file and pick up the procedure at an earlier stage, but needs to actually open a formal investigation.[62] Revocation of a Phase 1 decision would therefore lead to a more accurate assessment in Phase 2. Finally, this procedure has an advantage over the action for annulment in that the Court does not engage into economic considerations (which is costly and may lead to further errors, as it will be explained in detail in Section 3.3.), while the Commission could fully evaluate the situation, based on new, correct information.

However, if the Commission wished to increase the use of revocation, this solution would be largely incomplete. First, the Commission would need to obtain new information relating to incorrect information on which it based the decision, while it is not obvious how it could spontaneously discover it itself. Alternatively, a third party, for instance a competitor, might spot the inaccuracy and inform the Commission that a decisive piece of information was incorrect, provided that it would manage to convince the Commission to reopen the procedure. The Commission's discretion in that regard would, in fact, be decisive. Still, a shortcoming of this solution is that it refers to purely factual inaccuracies and not to interpretation of facts or to the quality of legal assessment, which are important potential sources of errors. In any case, the scarce practice of the Commission in revoking its decisions keeps this tool relatively mysterious and difficult to assess as a potentially effective instrument for error correction.

2.4.Ex post evaluation of measures

An interesting tool for error correction might be a periodical evaluation of measures whenever a risk exists that the balance between their positive and negative effects may be reversed after some time following their granting. Evaluation pertains only to the compatibility assessment of measures and has been introduced in most Commission's guidelines.[63] Basically, when an aid is approved as compatible with the internal market, the Commission may subject this approval to a time limitation (usually of four years or less), at the end of which an evaluation is necessary in order to prolong the scheme. The objective is to reassess the positive and negative effects of aid by an independent expert, on the basis of methodology defined in the Commission's decision[64] and the Commission's common methodology.[65] The evaluation requirement is reserved for cases where potential distortions of competition are significant. In practice, such

[62] C-362/09, *Athinaïki Techniki v Commission* (2010) ECLI:EU:C:2010:783, paras 58-74.
[63] RAG, Section 4; EEAG, Section 4; RR guidelines, Section 6.7; RDI Framework, Section 5.
[64] RAG, para 144; EEAG, para 243; RR guidelines, para 120; RDI Framework, para 121.
[65] Commission Staff Working Document, *Common methodology for State aid evaluation*, SWD(2014) 179 final.

aid measures are, in particular, aid schemes 'with large budgets or novel characteristics', and schemes 'in markets where significant market, technology or regulatory changes are expected.'[66] The Commission uses this tool more and more frequently.[67]

Evaluation has not been conceptualised in order to address errors in original decisions – rather, it reflects the consciousness that aid once compatible with the internal market may, with time and once granted, prove to be more harmful than beneficial. However, evaluation of aid might act as another chance to examine the measure in the situation in which the original assessment was incorrect. Indeed, supposing that a decision erroneously approved an aid, but attached to it the evaluation requirement, four years later the aid's negative effects may be considered to outweigh the positive ones, and the scheme will not be prolonged. Obviously, this may not remedy the preceding four-year period, in which the aid was legally applied, as the original decision is not subject to evaluation. Nonetheless, if the independent assessment leads to observation that the aid is no longer compatible, the effects of error will extend only to the four years, and not to an infinite period. The measure would thus have a chance to be cancelled after being erroneously allowed, according to the old saying: better late than never.

There are some advantages to this ex post evaluation: it is not limited by time frames, which bind the Commission during its regular investigation, and the limited scope of the compatibility assessment is conferred upon an expert, paid institution. Therefore, the "detailed economic and financial analysis" related to the *ex post* evaluation[68] constitutes a real opportunity to make up for the shortcomings of the investigation carried out by the Commission.

From a broader perspective, evaluation might also constitute for the Commission a source of reflection on how compatibility criteria should be defined in order to better capture measures which turn out to be harmful in longer run.[69] This learning aspect is considered to constitute an essential value of evaluation.[70] Hence, evaluation might allow to lower the probability of error in the future through a better distinction between desirable and undesirable measures, although it does not address the issue of error in application.

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[66] European Commission, *Code of Best Practices for the conduct of State aid control procedures* (2018/C 253/05) (Code of Best Practices), para 79.
[67] Nicole Robins and Hannes Geldof, 'Ex Post State Aid Analysis: First Impressions' (2018) 17 European State Aid Law Quarterly 494.
[68] ibid.
[69] Vittorio Di Bucci, 'The Modernisation of State Aid Control and Its Objectives: Clarity, Relevance, Effectiveness' (2014) 2014 Italian Antitrust Review 17.
[70] Robins and Geldof (n 67) 473.

A few doubts remain as to the utility of this tool: certainly, it might not be considered as a generally applicable check for Commission's assessments. More specifically, evaluation applies only to aid schemes and not to individual aid, and then only some aid schemes are evaluated, selected by the Commission. Moreover, evaluation does not imply that the Commission original decision is suspected to be erroneous and it is not aimed at repeating or correcting the Commission's original assessment. Hence, the potential for correcting the Commission's error lies in the fact that after four years, an independent expert prevents further harm caused by the aid while the Commission draws appropriate conclusions for the future. By its incomplete scope and impossibility to verify the original decision and the original measure, evaluation must be assessed as a useful instrument, but certainly not optimal to fight erroneous State aid assessments.

2.5.Incompatibility with the internal market law

The final possibility to eliminate a measure that has been erroneously approved might be to base the action on the internal market provisions. Indeed, aid measures may well infringe also EU's fundamental freedoms by constituting an obstacle to trade, in particular to the free movement of goods. Such an action would aim to circumvent the stalemate referring to annulment of Commission's decisions by shifting the attention from the erroneous decision to the measure itself. Accordingly, independently of the fact that a measure was erroneously approved by the Commission on the basis of State aid law, it would be assessed again and possibly forbidden in light of internal market law.

However, the Court of Justice underlined several times that the two sets of rules should be kept separate and that measures falling under State aid law should not be subject to control under internal market law. This 'exclusivity of the two sets of rules' and 'impossibility to use them interchangeably'[71] in practice means that those aspects of aid which are inseparably linked to the object of the aid may not be assessed in light of internal market provisions and fall solely under the scope of Article 107(1).[72] Indeed, if a State aid could be compatible with Article 107 TFEU and at the same constitute a quantitative restriction, the system of State aid control would become deprived of sense. Therefore, obstacles to trade covered by Article 107(1) are generally

[71] Andrea Biondi, Piet Eeckhout and James Flynn, *The Law of State Aid in the European Union* (Oxford University Press 2004) 108.
[72] Conor Quigley, *European State Aid Law and Policy* (3rd edn, Hart Publishing 2015) 145–146.

not covered by the internal market law.[73] Consequently, for an applicant to contest a State aid decision, he would need to identify certain elements of the measure which are not necessary for the attainment of its object or for its proper functioning while they infringe fundamental freedoms.[74]

Moreover, the Commission itself is required, when assessing a State measure, to verify whether it is compatible with other provisions of the Treaty, which obligation is particularly important where such other provisions also pursue the objective of undistorted competition, e.g. freedom of establishment or Article 101.[75] Accordingly, before adopting a compatibility decision, the Commission "must be aware of the risk of individual traders undermining competition in the common market."[76] At the same time, however, State aid assessment is not an appropriate forum to discuss issues, for which independent procedures are foreseen, e.g. under Article 101,[77] and the above-mentioned criterion of inseparability of other aspects from the object of aid continues to apply. At the end, to successfully challenge a State measure on the basis that it infringes other EU provisions (or conversely, to attack a State aid decision for failure to take other EU provisions into account) is a very roundabout and uncertain way, for which a very specific set of facts would probably need to occur.

2.6. Conclusion

When analysing alternatives to the action for annulment as error correction mechanisms, it turns out that although each tool offers certain advantages and may serve to remove negative consequences of an error, none of them and even not all of them taken together could reliably address issues identified in this thesis. Indeed, the action for annulment seems the best procedure to address possible errors that may arise in not opening of a formal investigation and in the application of complex criteria . This is because it creates the potential to remedy these issues directly. Therefore, the two types of action based on Article 263(4) – action on the merits and action based on the protection of procedural rights – will form the object of reflection on their potential to constitute a reliable error correction mechanism.

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[73] ibid 146–147.
[74] C-74/76, *Iannelli v Meroni* (1977) ECLI:EU:C:1977:51, paras 14 and 15.
[75] C-225/91, *Matra v Commission* (1993) ECLI:EU:C:1993:239, para 42; T-511/09, *Niki Luftfahrt v Commission* (2015) ECLI:EU:T:2015:284**,** paras 215-217; C-204/97, *Portugal v Commission* (2001) ECLI:EU:C:2001:233, para 40; T-197/97, *Weyl Beef Products and Others v Commission* (2001) ECLI:EU:T:2001:28, paras 72-75; Martin H Heidenhain, *European State Aid Law* (CH Beck; Hart 2010) 786.
[76] C-225/91, *Matra,* para 43; T-511/09, *Niki Luftfahrt*, para 215.
[77] C-225/91, *Matra,* paras 44-47; T-511/09, *Niki Luftfahrt*, para 188.

3. Action for annulment against the merits as an imperfect error correction mechanism

The shortcomings of the potential substitutes for the action for annulment only exacerbate the need for a well-functioning judicial review. However, the action on the merits – the most intuitive solution to address decisional errors and potentially the most comprehensive error correction mechanism, suffers from several shortcomings, which determine its effectiveness. The basic and the most significant problem, which hampers the exercise of the legality control, is the tough admissibility standard imposed on competitors. In addition, the Court decided not to engage into complex economic and social assessments. Although recent developments are very promising, the actions on the merits does not seem to be the most adapted to address the issues identified in this thesis.

3.1.Inaccessible admissibility standard

The key notions for admissibility of actions of natural and legal persons are those of direct and individual concern, of which the act must be to the applicant. The existence of direct concern is almost automatically established, because either aid is already granted at the moment of lodging the application or, if it is not, the possibility that a Member State decides not to grant an authorised measure is, according to the Court, only theoretical.[78] In any case, the Court usually does not carry out an analysis of this criterion, since it starts by examination of the criterion of individual concern. Indeed, individual concern of a decision to a competitor is subject to a severe assessment by the Court, and it consists in application of the *Plaumann* formula adapted to the State aid context.

3.1.1. Interpretation of Article 263(4) with regard to competitors of the aid beneficiary

Competitors as non-privileged applicants need to satisfy the *Plaumann* test, according to which the contested act must be of individual concern to the applicant, that is affect it "by reason of certain attributes which are peculiar to them or by reason of circumstances in which they are differentiated from all other persons and by virtue of these factors [are] distinguishe[d] individually just as in the case of the person addressed."[79] Building on that interpretation, the General Court and the Court of Justice developed a particular framework to evaluate whether an applicant-competitor is individually concerned by a State aid decision.

[78] C-11/82, *Piraiki-Patraiki* (1985) ECLI:EU:C:1985:18, paras 8-10.
[79] C-25/62, *Plaumann* (1963) ECLI:EU:C:1963:17, at 107.

The Court established its position in a line of cases, starting from 1986. In *Cofaz*, the Court recognised the possibility for competitors to bring an action for annulment, and thus extended the scope of admissibility of private actions.[80] Drawing from a judgment in an anti-dumping case issued a year before,[81] it concluded that in order for a competing undertaking to be individually concerned, it should be verified whether its position on the market was significantly affected by the aid, as well as it should be examined what part the complainant played in the administrative procedure: for example, whether it lodged the complaint.[82] The second element of assessment – the degree of participation of the private applicant in the procedure before the Commission – was criticised for it departed from the objective character of individual concern as laid down in *Plaumann*.[83] Therefore, in two judgments of 1995, the Court abandoned this criterion and claimed that the lack of participation in the administrative procedure does not mean that the undertaking 'can never be deemed to be individually concerned.'[84] Anyway, regardless of the degree of participation in the procedure, the position of the undertaking on the market must always be substantially affected by the measure in question.

Thus, substantial effect became central for evaluation of individual concern. After *Cofaz*, this notion was subject to several judgments of the Court, in which the latter applied previous case law to the new context. For instance, the Court confirmed its statement from 1969, according to which 'the mere fact that a measure may exercise an influence on the competitive relationships existing on the market in question cannot suffice to allow any trader in any competitive relationship whatever with the addressee of the measure to be regarded as directly and individually concerned by that measure'.[85] Similarly, the competitor cannot simply point at his 'status as a competitor of the undertaking in receipt of aid but must additionally show that

[80] Peter J Allen, 'The New Standard for Admissibility in European Community State Aids Actions after Cofaz' (1987) 10 Fordham International Law Journal 578, 578.
[81] C-264/82, *Timex Corporation v Council and Commission* (1985) ECLI:EU:C:1985:119.
[82] C-169/84, *Cofaz* (1986) ECLI:EU:C:1990:301, paras 24-26.
[83] The fact that an undertaking took part in the procedure does not make it objectively "more concerned" than others, which did not participate: Karpenschif (n 8) 247; Luc Gyselen, 'La Transparence En Matière d'aides d'etat: Les Droits Des Tiers' (1993) 29 Cahiers de droit européen 417.
[84] T-435/93, *ASPEC* (1995) ECLI:EU:T:1995:79, para 64; T-442/93, *ACC* (1995) ECLI:EU:T:1995:80, para 49.
[85] C-10/68 and 18/68, *Eridania e.a./Commission* (1969) ECLI:EU:C:1969:66, para 7; more recently: C-33/14 P, *Mory* (2015) ECLI:EU:C:2015:609, para 99; T-182/10, *Aiscat* (2013) ECLI:EU:T:2013:9, para 64.

its circumstances distinguish it in a similar way to the undertaking in receipt of the aid'.[86] The substantial effect also does not depend directly on the amount of the aid.[87]

Furthermore, the practice of the Court shows that the competing undertaking must identify "the principal features" of the structure of the relevant market, such as its geographic extent, its own market shares and those of other competitors, and the possible evolution of these shares after the granting of the aid.[88] The applicants also have to identify the product market.[89] This requirement, which virtually amounts to delineation of the relevant market usually carried out by the Commission in competition cases, seems curious taking into account that the Commission does not have to, as a general rule, delineate the relevant market for the purpose of State aid assessment.[90] More specifically, it is quite a burdensome exercise to be imposed on a market operator when the relevant market was not previously delineated in the procedure before the Commission.

On the other hand, the Court leaves some flexibility in the assessment of the substantial effect. Indeed, the latter does not have to lead to 'a significant decline in turnover, appreciable financial losses or a significant reduction in market share following the grant of the aid' as the aid may simply cause a 'loss of an opportunity to make a profit or a less favourable development.'[91]

One could observe that although the theory on the *locus standi* of competitors leaves to the courts quite a wide discretion in evaluating the criterion of individual concern, it certainly provides applicants with some guidance as to what facts may be relevant and should be covered in an application. However, the incoherent interpretation of this criterion in individual cases demonstrates an insurmountable uncertainty as to which situations possibly may and which may not qualify as demonstrating the existence of a substantial effect.

3.1.2. Inconsistence and severity in the case-law of the Court

The Court applied its interpretation of the substantial effect to several actions against State aid decisions. This practice shows that the courts are, first, very unfavourable to competing

[86] C-525/04 P, *Spain v Lenzing* (2007) ECLI:EU:C:2007:698, para 33; C-487/06 P, *British Aggregates* (2008) ECLI:EU:C:2008:757, para 48.
[87] T-362/10, *Vtesse Networks* (2014) ECLI:EU:T:2014:928, para 41.
[88] T-382/15, *Greenpeace* (2016) ECLI:EU:T:2016:589, para 43; T-488/11, *Sarc* (2014) ECLI:EU:T:2014:497, para 43.
[89] See e.g. T-90/09, *Mojo concerts* (2012) ECLI:EU:T:2012:30, paras 38 and 45.
[90] Draft Communication from the Commission, *Common principles for an economic assessment of the compatibility of state aid under Article 87.3*, (2009), paras 53-54.
[91] T-601/11, *Dansk Automat Brancheforening* (2014) ECLI:EU:T:2014:839, para 42; T-382/15, *Greenpeace*, para 42; C-525/04 P, *Spain v Lenzing*, para 34-35; C-487/06 P, *British Aggregates*, para 53.

undertakings and second, that the interpretation of the criterion of individual concern is inconsistent. Indeed, not only does the Court reject actions almost automatically, but also it does not develop a clear understanding of elements which demonstrate individual concern, and which do not. A selection of cases will be helpful in order to prove these two points.

A) Differentiation from other competitors when the applicant is a group of undertakings

In the often-cited judgment of the General Court in *British Aggregates*,[92] whose considerations on the admissibility of the action were later approved by the Court, the applying association of undertakings managed to prove the substantial effect of the aid on its members' position on the market. The aid in question imposed a levy on virgin aggregates, in order to favour the use of secondary aggregates. The General Court recognised that the undertakings – quarrying companies – were in direct competition with the beneficiaries of the aid. Although the Commission argued that the greater part of competitors' activity in terms of turnover was not related to aggregates, its claims were rejected because the activity in question was 'more than merely insignificant in relation to their principal activity.' This was sufficient to consider that the position of the undertakings on the market had been substantially affected.[93]

On appeal, the Commission noted that the position of the applying undertakings was not different 'from that of numerous other undertakings, whereas [the] Court ought to have applied a more stringent test' to find them individually concerned by a similar state measure. Not referring to this allegation directly, the Court stated that 'the fact that an undefined number of other competitors may, in appropriate circumstances, allege that they have suffered similar harm does not constitute an obstacle to the admissibility of the action'.[94]

The indulgence of the Court in those cases turned out to be exceptional. For instance, in the *Vtesse Networks* case of 2011, the Court required the applicant to indicate the difference between its situation and that of 34 other market operators in competition with the recipient of the aid, regardless of the fact that the applicant claimed to be 'the biggest direct competitor' of the beneficiary. Against several arguments, including the repartition of market shares on the market it delineated, the Court remained unconvinced how the applicant's position would be substantially affected by aid.[95]

[92] T-210/02, *British Aggregates* (2006) ECLI:EU:T:2006:253.
[93] ibid, paras 55-69.
[94] C-487/06 P, *British Aggregates* (2008) ECLI:EU:C:2008:757, paras 46-58.
[95] T-54/07, *Vtesse Networks* (2011) ECLI:EU:T:2011:15, paras 96-111.

In a more recent case concerning Vtesse Networks, the applicant claimed that it was the only surviving telecoms company in the lost tender process and the only eligible to receive the aid. However, the Court pointed out that technically, it was a consortium, to which the applicant belonged, and not the applicant itself, that was taking part in the tender. Consequently, the applicant ought to demonstrate that it was in a situation different than two other telecoms companies belonging to the consortium, even though they 'were not the most directly concerned by the main part of the tender,' as one company was involved only in one part of the bid and the other one only rented fibre to the applicant.[96] It remains puzzling why the Court found the relation between the three companies so crucial for the admissibility of the action.

In *Dansk Automat*, the aid measure divided the holders of a licence to operate gaming into three groups subject to taxes with different rates. In this case, the applicant association represented some of the companies belonging to the second group of licence holders, which paid a higher tax than the first group but lower than the third one. The contested part of the measure was the decrease in the tax for the first group of licence holders. However, the applying undertakings failed to establish the existence of an individual concern. Indeed, the applying undertakings were found to be concerned by the measure just like any other member of the association, and even more – just like any other operator of slot machine games in Denmark. Additionally, they were considered not to be differentiated from the third group that had to pay a yet higher tax.[97] The General Court's reasoning was confirmed by the Court of Justice on appeal.[98] This judgment lies far from *British Aggregates*, where undertakings that belonged to an association did not have to be differentiated either from each other or from other undertakings on the market.

B) <u>Differentiation from other market operators and impact on the competitive position</u>

While this could be suggested by the cases described above, the Court does not create any particular framework for admissibility of actions brought by associations of undertakings. Indeed, the same difficulty is encountered by individual applicants. For instance, in *Abes*, the fact that the applicant was a direct competitor of the beneficiary on the market could not, in itself, motivate the finding of a substantial effect. It would additionally need to demonstrate that

[96] T-362/10, *Vtesse Networks*, para 55.
[97] T-601/11, *Dansk Automat,* paras 38-49.
[98] C-563/14 P, *Dansk Automat* (2016) ECLI:EU:C:2016:303.

the circumstances of the case distinguished it in a similar way to the beneficiary.[99] That approach may be contrasted with the *Viasat Broadcasting* case, where the Court found the market position of the applicant to be substantially affected simply because the aid beneficiary was "the largest player and the applicant's main direct competitor on the [...] market."[100] In one paragraph, the Court considered that that fact made it necessary to take the view that the action was admissible.

Another illustration of the Court's inconsistency and of increasing reluctance to admission of actions may be found in the judgments in *Sniace* and *Sarc*. In *Sniace*, the General Court accepted the applicant's argument that the aid in question allowed its recipient to sell its products at prices approximately 20% lower than the average prices. This was held in spite of the Commission's argument that the general fall in prices of more than 30% had been observed on the market and was not due to the aid but to external factors. The General Court rejected the Commission's reasoning because the possibility that the aid allowed its beneficiary to sell its products at lower prices could not be 'precluded'. The argument that the applicant had good results and increased its production in the concerned period was also rejected because the applicant could have been in an even more favourable situation in the absence of the decision.[101] The action was thus admissible.

This stance of the Court dates back to 2004. By 2014, the approach of the General Court has evolved, to the detriment of competitors. In *Sarc*, the applicant argued that as a result of the aid, there was a significant gap between the prices of the products it offered and those offered by the aid recipient, as well as that its turnover from the sale of one of the concerned products decreased in the period after the grant of aid. However, the General Court observed that the applicant's turnover from the sale of another product as well as its overall turnover continued to grow. In its view, it precluded the conclusion that its position on the market had been substantially affected. It also required from the applicant evidence that the increase in turnover would be more significant without the aid being granted, which constitutes an important difference when compared to the standards in *Sniace*. Finally, the applicant should have provided information on its share of the market and the share of its competitors as well as any

[99] T-813/16, *Abes v Commission* (2018) ECLI:EU:T:2018:189, paras 49-53.
[100] T-125/12, *Viasat Broadcasting UK v Commission* (2015) ECLI:EU:T:2015:687, para 35.
[101] T-36/99, *Sniace* (2004) ECLI:EU:T:2004:312, paras 87-91.

shift in market shares since the measure at issue was granted,[102] a condition clearly absent in the *Sniace* judgment.

Similarly, in the recent judgment in *Deutsche Lufthansa*, as long as 215 paragraphs to conclude that the applicant had no standing, the Court confirmed that the applicant shall define the relevant market and provide the main information relating to its structure, which might include, in particular, the number of competitors active on that market, their shares of the market and any shift in those market shares since the measures in question were granted.[103]

The question of consequences on the economic situation also came up in *Dansk Automat,* where the calculations demonstrating the potential impact of the measure on the economic situation of the applicants were rejected as hypothetical. In that case, there was also no evidence that the experienced lower turnover had not resulted from the economic crisis.[104] Very similar conclusions were drawn in *Abes*.[105] It is straightforward to observe that the low standard of a 'non-precluded' relation between the aid and the lower turnover has disappeared.

In sum, order to meet the high expectations of the Court with regard to the substantial effect, the applicant shall contain in its application the following elements: the definition of the relevant geographic and product market, its share of that market and the share of its competitors, any shift in market shares following the moment the contested measure was granted, the results on the applicant's turnover, a reliable and not hypothetical calculation of the economic loss suffered because of aid, as well as differentiation from the situation of all other competitors of the beneficiary, more or less related to the measure in question. However, it remains uncertain whether even such exercise would secure the finding of admissibility, while much less precise applications may well, although on a random basis, be successful.

The difficulty may be best illustrated by statistics. In the period from 1st January 2010 to 5th May 2020,[106] 23 actions on the merits were brought by competitors against Commission's positive decisions. 17 were declared inadmissible, because the applicant did not demonstrate his position had been substantially affected by the decision. This amounts to the admissibility

[102] T-488/11, *Sarc* (2014) ECLI:EU:T:2014:497, paras 43, 55 and 56.
[103] T-492/15, *Deutsche Lufthansa v Commission* (2019) ECLI:EU:T:2019:252, para 149.
[104] T-601/11, *Dansk Automat,* para 51.
[105] T-813/16, *Abes*, paras 54-60.
[106] The choice of the starting date is motivated by the average duration of a procedure before the General Court in State aid cases – 25 months (as indicated in the 2017 Annual Report on Judicial Activity of the Court of Justice of the European Union, page 215). This period was added to 30th August 2008, the date from which Commission's decisions are analysed in this thesis.

rate of only 26%. Out of 6 admitted actions, 2 were annulled, which gives the annulment rate of 8%.[107]

3.1.3. Justifications and paradoxes of the high admissibility standard

The struggle of competitors to accede the Court limits, naturally, the possibility that errors will be effectively eliminated from Commission's positive decisions. However, it is reasonable to expect this harsh standard not to be totally aleatory, and one may find justifications for being cautious about granting open access to justice. On the other hand, the severity of the Courts often seems illogical, both in the context of State aid control and that of the action for annulment more generally.

A) Reasons for limited access to the Court

Visibly, the preliminary issue of admissibility of actions becomes central for the assessment of actions brought against State aid decisions by competitors. One of the reasons for which this problem arises in EU State aid control is that actors interested in annulment of Commission's decisions are situated at three different levels.

At the highest level are situated Member States: first, they have an automatic standing according to Article 263(2), and second, they are the exclusive addressees of State aid decisions. A level below are situated beneficiaries of the aid: they are not addresses of Commission decisions, but as actual (or potential) aid recipients, they are generally considered to be individually concerned in the sense of the fourth paragraph of Article 263.[108] Both types of actors are interested in annulment of negative decisions and therefore, the inadmissibility issue does not pertain to this kind of decisions and to Type 1 errors.

At the lowest level are situated competitors of the aid beneficiary, which makes the question of their *locus standi* problematic. Naturally, and similarly to aid beneficiaries, State aid decisions are not addressed to them, and they are certainly not as much affected by the decision as the beneficiary, because the granting of aid does not directly change their situation. However, their

[107] The study was conducted on the basis of information available at curia.europa.eu and Commission's Case search: http://ec.europa.eu/competition/elojade/isef/ . It must be disclaimed that due to limited resources and the aim to identify only general trends for the purpose of the thesis, the numbers may slightly vary, since some judgments of the Court could not appear during the search. The results should, therefore, be considered as approximative. However, it is improbable that possible omissions are so significant as to alter the findings of this chapter.

[108] C-323/82, *Intermills v Commission* (1984) ECLI:EU:C:1984:345, para 5; T-80/06, *Budapesti Erőmű v Commission* (2012) ECLI:EU:T:2012:65, para 42. With the exception of aid schemes, whereby undertakings struggle to demonstrate that they belong to the "closed circle" of beneficiaries and are, therefore, individually concerned: e.g. C-274/12 P, *Telefónica v Commission* (2013) ECLI:EU:C:2013:852, para 49; C-519/07 P, *Commission v Koninklijke FrieslandCampina* (2009) ECLI:EU:C:2009:556**,** paras 45-61.

position on the market may still be affected, so that it is necessary to identify a threshold of harm they must suffer in order to seize the General Court.

Therefore, the multi-level structure of actors concerned by State aid proceedings must have its impact on the admissibility of actions brought by competitors, since naturally, the first actors individually concerned shall be aid beneficiaries. Logically, some differentiation between the position of competitors and that of the beneficiaries must therefore be expected when assessing their *locus standi*.

Furthermore, one should not ignore the fact that admissibility of actions of non-privileged actors constitutes a problem common for all areas of EU law, and State aid is only one example that an excessively strict standard may effectively impede legality control of certain acts (Commission's positive decisions). More specifically, the *Plaumann* formula is in itself strict and its interpretation impedes access to EU justice in general, which is discussed in literature and brought up before the Court.[109] For instance, Advocate General Jacobs proposed to interpret the individual concern in terms of "substantial adverse impact," but this proposition has been rejected by the Court.[110] Consequently, the strict admissibility standard in State aid is just an expression of a broader Court's strategy, and does not seem to be motivated by any State aid considerations.

Finally, a frequently cited justification for limited access to the action for annulment is the one according to which an *actio popularis* could lead to unmanageable jump in the caseload of the Court. If the General Court was flooded with actions of unsatisfied market operators, it would have to spend more resources on their examination, which in turn would lead to a significant increase in the overall length of procedures before both Courts. Consequently, even the principle of effective judicial protection could not justify 'any radical liberalisation' of rules on legal standing under Article 263(4).[111] In the same vein, it has been argued that concerns of efficiency and caseload may be legitimate enough to determine the ability to challenge judgments or decisions.[112]

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[109] Craig (n 8) 334; Alexander H Türk, *Judicial Review in EU Law* (Cheltenham, UK ; Northampton, MA : Edward Elgar 2009) 67–77; Vivian Kube, 'Analysis of the Dossier de Procédure Original: Plaumann v. Commission Case 25/62' (2019) 4–6.

[110] Opinion of AG Jacobs in *UPA,* paras 60-99.

[111] Anatole Abaquesne de Parfouru, 'Locus Standi of Private Applicants under the Article 230 EC Action for Annulment: Any Lessons to Be Learnt from France' (2007) 14 Maastricht Journal of European and Comparative Law 364.

[112] Dalton (n 2) 94.

Finally, while the number of judges of the General Court was recently doubled, which naturally raised questions as to whether the interpretation of admissibility criteria will be softened,[113] such an effect has not been observed up to date. It is, in any case, not loosening of those criteria that motivated the reform, whose purpose was to limit the duration of the proceedings in light of the increased volume and complexity of litigation,[114] and not to increase that volume further.

B) Criticism of the strict admissibility standard

The above justifications for limited access to the action for annulment lead, however, to inconsistencies and illogical results. For instance, strict requirements translate into low chances for satisfying the strict admissibility standard as well as into high costs related to gathering of the relevant information.[115] Consequently, the current set-up effectively discriminates against small and weak competitors who do not dispose of necessary resources while, paradoxically, they are the most affected by the decision since they are more sensitive to small distortions on the market. High costs coupled with a high risk of dismissal certainly may be regarded as factors discouraging competitors from bringing actions on the merits.

Moreover, and as pointed out by Advocate General Jacobs, a restrictive reading of the criterion of individual concern leads to the conclusion that "the greater the number of persons affected by a measure the less likely it is that judicial review... will be made available."[116] He goes on to observe that „the fact that a measure adversely affects a large number of individuals, causing wide-spread rather than limited harm" is implicitly perceived by the Court as an obstacle to recognise individual concern of the applicants. Indeed, currently the decisions on the most harmful measures may avoid scrutiny because, in some sense, they cause too much harm to too many market operators.

Moreover, the fear of *actio popularis* seems to be unsubstantiated, as less strict approach to applicants' *locus standi* does not equal no barriers at all against unjustified actions against State aid decisions. Indeed, one shall bear in mind that admissibility is just a preliminary issue in the judicial review: apart from submitting an admissible action, the competitor will win the case

[113] Daniel Sarmiento, 'The Reform of the General Court: An Exercise in Minimalist (but Radical) Institutional Reform' (2017) 19 Cambridge Yearbook of European Legal Studies 245.

[114] Regulation 2015/2422 of the European Parliament and of the Council of 16 December 2015 amending Protocol No 3 on the Statute of the Court of Justice of the European Union, OJ L 341, 24.12.2015, p. 14–17, recitals 1-5.

[115] One may look at the amount of information and evidence provided by the successful applicant in case: T-57/11, *Castelnou Energía v Commission* (2014) ECLI:EU:T:2014:1021, paras 32-44.

[116] Opinion of AG Jacobs in *UPA*, para 59.

only if the Court accepts the substance. Therefore, even a fully open access would not lead to unlimited increase in actions, because competitors would still need to base their applications on strong and credible arguments – in the opposite case, they would lose the proceeding and be condemned to pay the costs.[117]

Indeed, it should be recalled that applicants, especially in economic cases, act rationally and lodge actions because they seek a benefit which exceeds the cost of the proceeding. The benefit they expect depends on the probability of succeeding in the action, and that probability depends, in turn, on various elements, such as the admissibility rate, the quality of the Commission's decision, the evidence brought and the pleas submitted. Admissibility removes only the first obstacle, but the probability that the Court annuls the decision does not rise: the question of admissibility of an action is separate from that of whether it is well-founded. Hence, lower admissibility conditions will not encourage to apply those applicants who do not believe they have a strong case anyway. In other words, the added value of higher admissibility lies in the opportunity for the Court to analyse the substance of actions, not in the actual annulment of more decisions.

Despite the economically motivated character of competitors' actions, the access to the Court is limited, which dramatically decreases the expected benefit from notifying errors in State aid decisions. However, the benefit-oriented reasoning of the applicant should be the very reason to loosen the admissibility conditions: the applicants should apply depending on whether they can successfully argue on the merits against a bad-quality decision, and their incentives to constructing a strong case should not be distorted by a threat to reject it on admissibility grounds.

Finally, in 2005, Advocate General Jacobs considered that the case-law on *locus standi* of competitors "is plainly unsatisfactory, being complex, apparently illogical, and inconsistent"[118] – over a decade later, this opinion seems all the same accurate.[119] Indeed, reading of the case-law gives an impression that the Court does not develop a uniform theory of substantial effect, building on previous judgments; rather, it seems to evaluate each case in isolation from the previous ones. Even if the narrow interpretation could be justified, the same may not be said about the inconsistency in the Court's approach and the state of uncertainty it creates.

[117] As also observed by Craig (n 8) 342.
[118] Opinion of AG Jacobs in case C-78/03 P, *Commission v Aktionsgemeinschaft Recht und Eigentum* (2005) ECLI:EU:C:2005:106, para 138.
[119] Buendía Sierra (n 8); Hancher, Ottervanger and Slot (n 8) 1–027, 1–028; Craig (n 8) 306, 330, 332; Karpenschif (n 8) 246; Fauré (n 8) 196; Vandersanden (n 8).

3.2. The Montessori judgement – away from the individual concern[120]

The strict interpretation of individual concern is a serious issue, which goes beyond the field of State aid law. Therefore, it is extremely interesting to note a still recent judgment of the Court of Justice in the *Montessori* case, which suggests that the period of inaccessibility of competitors' actions might, at least to a certain extent, come to an end. This result could be achieved through a completely novel interpretation of Article 263(4) TFEU in the context of State aid decisions, which allows one to eliminate application of the criterion of individual concern, and therefore to circumvent the delicate issue of substantial effect. Indeed, the General Court held, and the Court of Justice confirmed on appeal, that Commission's decisions concerning aid schemes constitute regulatory acts, and therefore it is sufficient to be directly concerned by them to bring an admissible action for annulment.

3.2.1. Decisions on aid schemes as regulatory acts

The General Court addressed the issue of legality of a decision on an Italian exemption from the municipal tax on real estate, by which the Commission considered, in part, that it was absolutely impossible to order recovery of incompatible illegal aid, and in part that the measure did not constitute aid. It considered that a Commission's decision on an aid scheme constitutes a non-legislative act of general application and thus a regulatory act in the sense of Article 263(4) TFEU.[121] Consequently, it may be attacked by any natural of legal person to whom it is of direct concern, as long as it does not entail implementing measures.[122]

The Court, supported by the Advocate General, endorsed such a qualification of Commission's decisions on aid schemes.[123] In particular, it considered that decisions authorising or prohibiting a national scheme are of general application since they apply to objectively determined situations and produce legal effects with respect to a category of persons envisaged in a general and abstract manner.[124] As the Court pointed out, the fact that a part of the decision is of individual concern to the restricted class of beneficiaries of the aid scheme does not preclude that part from being regarded as of general application to objectively determined situations and producing legal effects for categories of persons envisaged in a general and abstract manner. Indeed, the Commission decision not to order recovery of aid preserves the anticompetitive

[120] Parts of this section were published in: Maria Segura Catalán, Marianne Clayton and Anna Nowak-Salles, 'Third Party Rights and the State Aid Procedures Revisited by the European Courts: An Ever-Sounder State Aid Control' (2019) 10 Journal of European Competition Law & Practice.
[121] T-220/13, *Scuola Elementare Maria Montessori v Commission* (2016) ECLI:EU:T:2016:484, paras 47-52.
[122] Article 263(4) TFEU.
[123] C-622/16 P, *Scuola Elementare Maria Montessori v Commission* (2018) ECLI:EU:C:2018:873.
[124] ibid, paras 29-31.

effects of the general and abstract measure which that exemption constitutes with respect to an indefinite number of competitors of the beneficiaries of the aid granted under the measure.[125] This reasoning, which in practice results in non-applicability of the criterion of individual concern, constitutes a great chance for competitors wishing to contest, on the merits, decisions on State aid schemes. However, that case concerned, on the one hand, a decision that the measure did not constitute aid and on the other, that recovery was impossible: hence, not a decision that aid is compatible. While it seems straightforward to extend considerations to compatibility decisions and to individual aid, which procure the same effects on competitors, such confirmation is still expected from the Court in a future case. In addition, uncertainties remain as to how the *locus standi* will now be examined, as the focus must necessarily be shifted from the substantial effect to direct concern and the existence of implementing measures.

3.2.2. Direct concern

The criterion of direct concern, which was practically assumed to be fulfilled under the previous case-law, has now gained attention of the Court, and will have to be subject to interpretation. Indeed, previously the Court used to limit itself to the claim that the decision produces legal effects purely automatically on the basis of the EU rules alone without the application of other intermediate rules.[126] Even though the Court reiterates that consideration in the *Montessori* judgment,[127] it now gives more attention to the question of whether the measure directly affects the legal situation of the individual.

In that regard, the Court observed that the applicant disposes, under the EU State aid law, of the right to competition undistorted by national measures.[128] Hence, the fact that a Commission's decision leaves intact all the effects of national measures, which are claimed by the applicant to be incompatible with that objective, may lead to a conclusion that the decision directly affects its legal situation. Nevertheless, it further held that direct effect on a competitor-applicant cannot be deduced from the mere potential existence of a competitive relationship and therefore, it was not sufficient to demonstrate that the services offered by the applicant in the *Montessori* case were similar to those offered by the aid beneficiaries.[129] Consequently, the applicant needs to adequately explain the reasons why the Commission's decision is liable to

[125] ibid, paras 34-39.
[126] C-11/82, *Piraiki-Patraiki* (1985) ECLI:EU:C:1985:18, paras 8-10.
[127] C-622/16 P, *Scuola Elementare Maria Montessori,* para 54.
[128] ibid, para 43.
[129] ibid, paras 44-46.

place him in an unfavourable competitive position and thus to produce effects on his legal situation.[130] In the *Montessori* case, the direct concern was recognised because the applicant's establishments were situated in the immediate vicinity of beneficiaries carrying on similar activities, which were thus active on the same market for services and the same geographical market.[131]

Following the judgment, it becomes necessary to determine the relationship between a competitor and the aid beneficiary which would substantiate the existence of direct concern, or in other words, how 'direct' the direct concern in practice needs to be. This fact-based exercise will determine whether the direct concern will be an accessible standard, or whether it will become a new individual concern. For instance, the insufficiency of 'the mere potential existence of a competitive relationship' is transplanted to the Court's considerations on direct concern straight from the interpretation of substantial effect. On the other hand, the Court did not require from the applicant to delineate the relevant market or provide detailed data, which would equal the burdensome exercise of showing oneself substantially affected. Hence, although the distinction from other competitors as such is eliminated, it remains to be seen whether the Court adopts a strict or broad approach to the direct effect, and whether the prospects for competitors of bringing an admissible State aid case will in fact change.

3.2.3. Implementing measures

The criterion of existence of implementing measures comes down to the question of whether the principle of effective judicial protection requires the applicant be given access to the Court. More specifically, whenever implementing measures exist, those may be attacked directly by the applicant within the framework of a national or EU procedure, and hence nothing justifies legal standing against the original act. On the contrary, if no implementing measures follow an act, the applicant shall be able to go against that act in order to safeguard its rights.[132]

The Court, similarly to its considerations on whether an act is of general application, reminded that the existence of implementing measures shall be assessed in light of the particular position of the applicant and thus, an act may at the same time entail implementing measures with regard to the aid beneficiaries, but not to their competitors.[133] This is precisely the case of

[130] ibid, para 47.
[131] ibid, para 50.
[132] ibid, paras 58-60.
[133] ibid, paras 61, 64-66.

Commission's positive decisions and decisions not to order recovery. Consequently, it seems that the lack of implementing measures is a relatively uncontroversial issue and shall not constitute an obstacle to admissibility of competitors' actions.

3.2.4. Into the future

On the one hand, the judgment leaves aside individual aid measures, so that actions against this type of decisions still face the problem of inaccessible standard of substantial effect. The fact that openness of judicial review depends on the scope of the measure might be considered as curious and unjustified.[134] On the other hand, it is worth noting that aid schemes constitute the vast majority of state measures, namely around 77%.[135] Therefore, if the *Montessori* judgment effectively facilitates access to the Court by competitors of aid schemes' beneficiaries, the judgment presents potential for establishing an effective judicial review of Commission decisions, and thus for better detecting errors vitiating them. Naturally, it remains to be seen how far-reaching the effects of the judgment will be. At the moment of writing this thesis, no judgment has been issued by the General Court, in which it would admit a competitor's action on the basis of the *Montessori* judgment. Nevertheless, several applications invoking the existence of *locus standi* on that basis were introduced and are now pending.[136]

Regardless of the promise of a more open access to the action for annulment, admissibility is only a preliminary step, and as such it does not guarantee an efficient detection of errors. The latter depends on the quality of review, which comes down to the question of whether and how the Court may identify errors in individual decisions.

3.3.Limited scope of judicial review

Lower admissibility standards would naturally result in better chance for the Court to pronounce itself on the substance of actions. However, the question arises about the quality of this assessment and the ability to effectively identify errors: what is and what should be the scope of the review? Indeed, as it stands now, the Court itself has put some limits on its examination, which consist first, in rejecting information unavailable to the Commission at the moment of

[134] Thomas Jaeger, 'The Inquisition Retakes Brussels (Via the New Procedural Regulation)' (2013) 12 European State Aid Law Quarterly 441, 372.
[135] Over 2500 aid schemes against over 600 ad hoc measures. The statistics are based on the Case search of the European Commission and Commission's 2018 State aid Scoreboard.
[136] C-594/19, *Deutsche Lufthansa v Commission***;** C-453/19, *Deutsche Lufthansa v Commission***.**

taking the decisions and second, in refusing to carry out economic assessments. Both these limits will be analysed in turn.

3.3.1. Review limited to the information available at the time of the decision

The Court has clearly considered that the review does not go beyond what was or might have been known to the Commission at the moment the decision was taken. In numerous cases, it held that legality of a decision must be assessed on the basis of the elements of fact and of law existing at the time when the decision was adopted, and that the Commission's assessments must be examined solely on the basis of the information available to it at the time when they were made.[137] In the same vein, the Court's assessment cannot depend on retrospective considerations on the decision's efficacy.[138]

Consequently, a decision may not be annulled due to the fact that aid did not in reality produce the desirable effects, which were expected before it was granted. Such approach follows from the nature of the *ex ante* control: the Commission may not be blamed for not having data that becomes available only after the decision is taken. Moreover, the function of the legal review is not to assess the measure anew, but to assess the reasoning contained in the Commission's decision, which is reflected in the distinction between the standard of judicial review on the one hand, and the standard of proof required from the Commission when adopting the decision on the other.[139]

Even though understandable, this limitation has an important shortcoming, as judicial review becomes generally not concerned with the quality of information provided to the Commission during the procedure. Indeed, the examination by the Court covers the question of whether the assessment of information at hand was correct and, which is related, whether the information was sufficient to draw a given conclusion. However, the circumstance that the Commission obtained incorrect or incomplete information and based on it its decision remains out of interest of the Court. Indeed, the Court had considered that "where there is no information to the contrary from interested parties, the Commission is empowered to take as its basis the factual elements it has at the time it adopts its final decision, even if they are incorrect" [emphasis

[137] C-300/16, *Commission v Frucona Košice* (2017) ECLI:EU:C:2017:706**,** para 70; C-290/07 P, *Commission v Scott* (2010) EU:C:2010:480, para 91; Joined cases T-371/94 and T-394/94, *British Airways and Others* (1998) ECLI:EU:T:1998:140, para 81; T-102/07, *Freistaat Sachsen and Others v Commission* (2010) ECLI:EU:T:2010:62**,** para 115; T-126/99, *Graphischer Maschinenbau* v *Commission* (2002) ECLI:EU:T:2002:116, para 33; T-369/06, *Holland Malt v Commission* (2009) ECLI:EU:T:2009:319, para 119.
[138] Joined cases T-371/94 and T-394/94, *British Airways,* para 81.
[139] Craig (n 8) 471.

added].[140] This finding arises from the broader duty of the Member State to cooperate with the Commission and provide all necessary information, so that the Commission may not assume that the State submits mistaken data and be blamed for the State's bad faith or negligence.[141] Although this solution is sensible in light of the object of the review (whether the Commission made an error in assessment), it does not allow to address the issue of errors caused by informational asymmetries described in Chapter 1 of this thesis, where the main risk is that of receiving incomplete or biased information.

A related issue is that of whether the information 'available' to the Commission should extend also the information the Commission could or should have obtained during the administrative procedure. On the one hand, the Court considered with regard to the private creditor test that the notion of 'available information' covers information, which "seemed relevant to the assessment to be carried out in accordance with the case-law... and which could have been obtained, upon request by the Commission, during the administrative procedure."[142] On the other hand, and logically, the Commission "is not obliged to examine of its own motion and by way of guesswork what matters might have been brought before it during the administrative procedure."[143] Hence, the Court will generally refer in its legality assessment only to the information at the disposal of the Commission when the decision was taken or, potentially, that the Commission should have without doubt gathered within the framework of a diligent investigation.

3.3.2. Exclusion of economic considerations from the scope of review

The State aid reform, which started in 2005 with the SAAP and continued with 2012 SAM, consisted mainly in an increased use of the 'refined economic approach,' both in the assessment under Article 107(1) and the compatibility analysis.[144] Naturally, the question arises how such technical assessment may be reviewed by the Court. The case-law shows that these considerations remain outside the scope of the judicial review as such, but they imply stricter requirements pertaining to the statement of reasons.

[140] T-139/09, *France v Commission* (2012) ECLI:EU:T:2012:496, para 52.
[141] This is what the Court seems to suggest in ibid, para 52.
[142] C-300/16, *Commission v Frucona Košice* (2017) ECLI:EU:C:2017:706, para 71.
[143] T-123/09, *Ryanair v Commission* (2012) ECLI:EU:T:2012:164, para 104; C-367/95 P, *Commission v Sytraval and Brink's France* (1998) ECLI:EU:C:1998:154, para 60.
[144] SAAP, in particular paras 18-22.

In its evaluation of State measures, the Commission enjoys a discretion, the exercise of which involves economic and social assessments which must be made in a Community context.[145] In that regard, the Court consistently held that "judicial review of the manner in which that discretion is exercised is confined to establishing that the rules of procedure and the rules relating to the duty to give reasons have been complied with and to verifying the accuracy of the facts relied on and that there has been no error of law, manifest error in the assessment of the facts or misuse of powers."[146] This limitation pertains both to the compatibility assessment[147] and qualification of the measure as aid, even though the latter is, as a general rule and unlike the former, subject to comprehensive review by the Court.[148]

More specifically, the role of the judge is to "establish whether the evidence relied on is factually accurate, reliable and consistent, (…) whether that evidence contains all the relevant information which must be taken into account in order to assess a complex situation and whether it is capable of substantiating the conclusions drawn from it."[149] In doing so, the court must avoid substituting its own economic assessment for that of the Commission[150] and pronouncing itself on whether the measure is ultimately compatible:[151] the assessment will be redone by the Commission itself if the decision is annulled. However, the Court may review the Commission's interpretation of economic data.[152] In addition, in case of contradictory information submitted by the parties, the Court may require the assistance of independent economic experts;[153] although, this possibility is virtually never used.

Therefore, it seems that the Court's role consists mainly in verifying the quality of evidence submitted before the Commission. However, this mission is not obvious, as it might be difficult

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[145] C-310/85, *Deufil* (1987) ECLI:EU:C:1987:96, para 18.

[146] C-415/15 P, *Stichting Woonpunt and Others v Commission* (2017) ECLI:EU:C:2017:216, para 53; Joined Cases C-75/05 P and C-80/05 P, *Kronofrance v Germany and Others* (2008) ECLI:EU:C:2013:458, para 59; T-305/13, *SACE and Sace BT v Commission* (2015) ECLI:EU:T:2015:435, paras 96-97.

[147] Joined cases T-244/93 and T-486/93, *TWD* (1995) ECLI:EU:T:1995:160, para 82.

[148] C-56/93, *Belgium v Commission* (1996) ECLI:EU:C:1996:64, paras 10 and 11; C-486/15P, *Commission v France and Orange* (2016) ECLI:EU:C:2016:912, paras 87-92.

[149] C-290/07 P, *Scott* (2010) ECLI:EU:C:2010:480, paras 65 and 66; Joined Cases T-479/11 and T-157/12, *France v Commission* (2016) ECLI:EU:T:2016:320, para 75; Joined cases T-29/10 and T-33/10, *Netherlands and ING Groep NV v European Commission* (2012) ECLI:EU:T:2012:98, para 102.

[150] C-169/95, *Spain* v *Commission* (1997) ECLI:EU:C:1997:10, para 34; Joined Cases T-371/94 and T-394/94, *British Airways and Others* v *European Commission* (1998) ECLI:EU:T:1998:140, para 79.

[151] Opinion of AG Stix-Hackl in case C-148/04, *Unicredito Italiano* (2005) ECLI:EU:C:2005:522, para 44.

[152] Joined Cases T-479/11 and T-157/12, *France v European Commission* (2016) ECLI:EU:T:2016:320, para 75; Joined cases T-29/10 and T-33/10, *Netherlands and ING Groep NV v European Commission* (2012) ECLI:EU:T:2012:98, para 102.

[153] Like it did in case C-169/84, *Cofaz* (1990) ECLI:EU:C:1990:301**,** para 28. In that case, the experts' report led to annulment of the decision. See also Rules of Procedure of the General Court, Article 96 and The Statute of the Court of Justice of the European Union, Article 25.

for the Court to consider a certain piece of evidence to be insufficient without actually carrying out an economic assessment. Indeed, drawing a conclusion as to the evidence relied on by the Commission 'requires evaluation, not simply observation.'[154] For instance, as pointed out within the framework of completeness of notification, 'even a prima facie assessment of the compatibility of an aid measure with the Treaty entails complex economic and social assessments. The borderline between information necessary for such a first assessment and insufficient information cannot be delimited exactly;' accordingly, the Commission's broad margin of appreciation extends to the necessity for further questions.[155] Moreover, 'the nature of the evidence the Commission must adduce depends, to a large extent, on the nature of the State measure at issue.'[156]

As a result, if the Court faces the problem of evidence in an individual assessment, it may find itself unable to review the legality without carrying out an economic assessment or it may struggle to draw a line between the two. As an alternative, it might impose on the applicant a heavy burden of proof. The latter suggestion has been made by Advocate General Fennelly, who justified it in view of 'the Court's very proper reluctance to substitute its evaluation for that of the Commission of factual issues on which differing views can legitimately be held.'[157] Therefore, the applicant should demonstrate to the Court an 'objectively and evidently wrong' character of the Commission's findings, or draw from the facts secondary conclusions.[158] The Court did not refer itself to these propositions but in other cases, it concluded that if the applicant wants to establish the existence of a manifest error in the assessment of facts by the Commission, 'the evidence adduced [...] must be sufficient to make the factual assessments used in the decision in question implausible.'[159] It is naturally understandable to impose the burden of proof on the applicant, but it adds another layer to the problem of actions for annulment brought by competitors – if the inadmissibility issue is followed by a heavy burden of proof, it is doubtful that competitors' costs of bringing an action will more than rarely be lower than the expected benefit.

The limitation of the scope of review may be justified by the fact that the Commission's specialised State aid unit is better-suited to carry out economic reasoning than the generalist

[154] Craig (n 8) 473.
[155] Opinion of AG Jacobs in case C-99/98, *Austria v Commission* (2000) ECLI:EU:C:2000:396, paras 104-105.
[156] C-559/12P, *France v Commission* (2014) ECLI:EU:C:2014:217, para 66.
[157] Opinion of AG Fennelly in case C-56/93, *Belgium v Commission* (1996) ECLI:EU:C:1996:64, para 29.
[158] ibid.
[159] T-380/94, *AIUFFASS and AKT v Commission* (1996) ECLI:EU:T:1996:195, para 59; T-308/00, *Salzgitter v Commission* (2004) ECLI:EU:T:2013:30, para 138.

EU Court. Moreover, the Commission's appreciation may reflect some policy choices, for which it is exclusively responsible, and in which the EU courts may not get involved.[160] As a consequence, more frequent judicial review of State aid decisions would not need necessarily lead to actual elimination of errors in State aid assessment, since there is no reason to claim that the Court's assessment would be more accurate than that carried out by the Commission.

Moreover, in the case of uncertainty whether the court will be able to identify the socially desirable (correct) outcome, the Commission could conform its decisions to the expected judgment rather to the socially desirable standard. Indeed, the adjudicator adjusts its decisions to his perception of what the Court may decide on the basis of given facts of the case; to put it differently, the Commission wants to win the case before the Court, and it will adopt decisions that do not risk annulment. This is, of course, a desirable solution if the Court carries out correct assessment and its judgments reflect socially desirable outcomes. However, if the Court makes mistakes, which lead to socially undesirable outcomes, the Commission may follow such undesirable outcomes in its decisions to save their legality, instead of adopting a sound approach that would risk to be annulled by the Court. Thus, the threat of annulment could distort Commission's incentives instead of motivating it to increase the quality of decision-making in line with social welfare concerns.[161]

On the other hand, this approach has been criticised for being too sceptical about judges' competences in matters falling within the scope of economic assessments. First, judges may use their investigative powers in order to obtain the necessary assistance; second, a more extensive standard of review might even be expected in order to balance the Commission's discretion which was widened with the SAAP.[162] Thus, complexity or technicality of the assessment as such should not influence the standard of review, which should be deep and comprehensive, and the so-called 'restrained control' should apply only to Commission's typically discretionary assessments.[163]

In view of the above characteristics of the legal review of merits of Commission's State aid decisions, one may identify two main obstacles to the effective use of the action for annulment as an error correction mechanism. First, competitors still face the admissibility issue, which precludes reliable review of decisions on individual aid. Certainly, review of aid schemes

[160] Massimo Merola and Jacques Derenne (eds), *The Role of the Court of Justice of the European Union in Competition Law Cases* (Bruylant 2012) 233.
[161] Shavell (n 1) 4, 20–21.
[162] Merola and Derenne (n 160) 231.
[163] ibid 239, 243, 247.

should become much more accessible, provided that the *Montessori* judgment will be consistently applied, and that no new high standard will emerge. Second, the scope of review of an admissible action is still limited to information the Commission had at its disposal at the time of the decision, as well as to non-complex and non-economic parts of the decision.

3.4.Possible improvements to the action for annulment and its inherent limits

The above analysis calls for suggestions as to potential improvements. The latter may relate either to admissibility or assessment on the substance. At the same time, the limits of the action for annulment, whose form has been shaped for all areas of law and which go far beyond State aid control, would need a systemic solution and would thus constitute a much more complex project than the present one.

3.4.1. Tackling the admissibility standard

In order for the action for annulment to become a more effective tool of error correction, one shall first address the issue of admissibility. Although the problem might have recently been resolved for three-fourths of State measures via the abandonment of individual concern in the *Montessori* case, it would still be pertinent to address the highly imprecise and unreliable criterion of substantial effect in actions against individual aid. More specifically, the Court should take account of the volume and character of information required from the applicants: if the cost of gathering of such information is too high, competitors will not bring actions. It would be arbitrary to point here at the exact elements that should be provided in order to demonstrate a substantial effect. However, some requirements intuitively seem exaggerated as compared to the scope of assessment carried out by the Commission: for instance, it is difficult to justify why the applicant needs to delineate the relevant market, while the Commission does not need to do so in order to qualify a measure as aid or to evaluate its distortive effects.

In general, and in order to keep an acceptable balance between the expected benefit and expected cost, which shall be dictated mainly by pertinence of arguments on the substance, the Court should not impose too severe admissibility requirements. Such approach would be truly concentrated on the fundamental function of the action for annulment as allowing to eliminate illegal decisions. However, lower admissibility standard would need to be further accompanied by an effective substantive assessment by the Court. The latter might possibly be achieved in several ways.

3.4.2. How to evaluate actions on the substance

A straightforward argument would be that judges should engage more in economic assessments. It shall, however, be noted that judges are not allowed to substitute their own economic assessment for that of the Commission in numerous fields of European law. Indeed, such limit imposed on review of State aid decisions is only one expression of the general delimitation of the competence of the Court. Therefore, it would be necessary to justify why the Court should extend its competence to economic considerations in general, or alternatively why it should acquire such competence specifically in the field of State aid.

While this thesis does not target an analysis of the action for annulment in EU law in general, a quick reflection confirms that the idea of judges carrying out complex State aid assessments has several shortcomings. Indeed, there is no convincing reason to expect judges to carry out a more effective economic assessment than that carried out by the Commission. It is the Commission that was entrusted with the mission of enforcing EU State aid law and hence, it specialised its units to deal with State aid issues on a daily basis. On the contrary, a generalist court cannot aspire to be an expert in a complex case-by-case assessment of State measures. At the same time, the idea of a specialised court for EU State aid assessment is rather unrealistic, and again, it would have to take into account other complex fields of EU law, which could merit a similar special treatment. Consequently, if given the power to judge on the substance without limits, the risk arises that the Court would replace the Commission's erroneous or even rightful assessments by its own erroneous ones, thus leading to an actual increase in the number of errors and unnecessary costs related to its assessment.

If the Court cannot directly undermine the Commission's assessment, it needs to find a basis, on which the decisions could be reliably reviewed. For instance, the Court might reinforce its ability to judge complex matters by resorting, within the framework of the judicial procedure, to the use of experts. Such a tool is available both to the general Court[164] and the Court of Justice,[165] although it is currently completely unexploited, as the Court never calls for experts' opinions in State aid cases. It could certainly be a solution in a quickly growing economically-oriented environment of State aid assessment. It has been, already in 1991, pointed out that the

[164] Rules of Procedure of the General Court, Articles 91(e) and 96.
[165] Rules of Procedure of the Court of Justice, Articles 64(d) and 70.

Court may not "shy away from technical questions" and should be able to resolve such issues by commissioning an expert's report.[166]

In addition, if conferring upon judges more power within the framework of economic assessment brings the risk of incorrect assessment by the judge himself, verification of the statement of reasons seems to be a satisfying alternative. Indeed, Article 296 TFEU, as interpreted by the Court, requires to disclose in a clear and unequivocal fashion the reasoning followed by the Commission in such a way as to enable the persons concerned to ascertain the reasons for it and to enable the Court to exercise its power of review.[167]

In the circumstance under which the Commission's evaluations become too complex to control as such, the statement of reasons becomes the basis for carrying out the judicial review, and it is also very often invoked by the applicants. However, for this solution to work as an error correction mechanism, one needs to assume that the statement of reasons is an appropriate benchmark for assessing the accuracy of assessment and hence, that its insufficient or unconvincing character equals an incorrect assessment of the measure. This does not necessarily need to be the case, as the Commission may simply fail to justify the assessment to the standard required by the Court although the assessment itself is correct. This shortcoming is related to the fact that ultimately, in the case in which the Court bases its analysis on the statement of reasons, the judicial review is a review of the decision and not that of the underlying measure.

Although the abovementioned risk is not purely hypothetical, one may ask how, in practice, the Commission would not be able to provide a satisfactory statement of reasons: it shall simply reproduce and summarise the reasoning it carried out. Indeed, it remains a matter of Commission's diligence to provide satisfying justification for its reasoning. Therefore, the Commission should be able to defend its reasoning via a statement of reasons whenever this reasoning is correct, so that the Court may effectively control it. That way, an insufficient statement of reasons should be a signal that a decision to may be vitiated by flaws influencing the outcome of assessment.

[166] Opinion of AG Jacobs in case C-269/90, *Technische Universität München v Hauptzollamt München-Mitte* (1991) ECLI:EU:C:1991:317, para 13.

[167] C-333/07, *Régie Networks* (2008) ECLI:EU:C:2008:764, para 63; C-390/06, *Nuova Agricast* (2008) ECLI:EU:C:2008:224, para 79; Joined Cases C-341/06 P and C-342/06 P, *Chronopost and La Poste* v *UFEX and Others* (2008) ECLI:EU:C:2008:375, para 88.

3.4.3. Implications of the purely legal character of judicial review

Although the use of experts and reliance on the statement of reasons might respond to issues concerning complex economic assessments, ambiguity arises also as to the scope of the assessment that the Court may already fully carry out, i.e. the purely legal one. An example here may be qualification of a measure as an aid scheme, whose erroneous nature constituted the basis for annulment of a 2018 Commission's decision. Indeed, in the judgment in the *Excess profit* case on the Commission's investigation into Belgian tax system, the Court considered that it could not be concluded that the measure could be qualified as an aid scheme. More specifically, it required application of implementing measures by tax authorities, which in turn involved a discretionary, qualitative and quantitative assessment on a case-by-case basis; moreover, the beneficiaries of the scheme were not defined in an abstract and general manner.[168] Verification of the existence of an aid scheme is relatively straightforward, and may effectively be carried out by the Court, especially when the Commission qualifies measures as schemes without complete analysis. Nonetheless, the problem arises that although such a Commission's error may lead to an incorrect final outcome (allowing aid which is harmful or the opposite), it may also be of no importance for the final result at all. For instance, in the *Excess Profit* case, the Commission would now have to go after each individual tax ruling in order to condemn measures it previously all qualified under one scheme. On the one hand, it is possible that individual measures do not reach applicable thresholds, do not qualify as aid, or due to their characteristics, they benefit from exemption under Article 107(3). In such a case, spotting error in the original decision would allow to distinguish desirable from undesirable measures and save the former. On the other hand, the Commission might in any case adopt negative decisions with recovery with regard to the individual measures. Consequently, it would have to bear much higher costs in order to obtain the exact same result.

Therefore, spotting purely legal errors might does not necessarily produce desirable results from the point of view of preventing granting of harmful measures and ensuring granting of desirable ones. On the other hand, this aspect of error correction might contribute to an increased quality of decision-making in the future, as well as serve other objectives, such as legal certainty or the rule of law, which are not analysed in this thesis. This case demonstrates the plurality of objectives of judicial review and imposes a clear limit on suggestions aimed solely at lowering the expected cost of error.

[168] Joined cases T-131/16 and T-263/16, *Belgium and Magnetrol International v Commission* (2019) ECLI:EU:T:2019:91, paras 90-120.

Taking the above into account, a distinction may be made between an effective judicial review, which resides in the practical ability of the Court to review decisions (through admissibility standards and competences of which it disposes when carrying out the control) and an error-minimising judicial review, which fulfils the outcome-based function of eliminating errors as to the nature of the measure in Commission's decisions. Although an effective judicial review is a necessary pre-requisite for an error-minimising review, elimination of error is not automatic and requires a reflection on the scope of findings on which the Court's level of expertise might exceed that of the Commission. Expanding the scope of investigation to economic considerations does not need to be the most appropriate means to secure a judicial review of decisions, while in any case, the review must sometimes suffer from condemning procedural or legal errors, which bear no relation to the question of whether or not a measure is desirable. In any case, control of the statement of reasons as well as the use of experts seem to contribute to securing as efficient judicial review as one may get under the current shape and competence of the Union's court, while avoiding the risk that the Court makes errors itself.

3.5. Conclusion

In sum, the problem of the action for annulment directed against the merits of a decision is that the way from submission of application by a competitor to annulment of a truly erroneous decision is long and uncertain. Even if admissibility is acknowledged and the Court does not declare itself incompetent to evaluate Commission's considerations, one may still not be certain that the Court will manage to accurately identify the error. At the same time, solutions to these limits encroach upon the system for assessing the action for annulment in general, as these issues extend beyond the State aid area. Consequently, the fact that some errors in positive State aid decisions may be, by definition, undetectable and impossible to eliminate is only one consequence of the general design of the action for annulment in EU law, and it sends one back to that higher level, which is not the object of the present thesis.

It is true that even a failing judicial review, i.e. one which does not improve, or even worsens, case outcomes, may still be desirable because its existence produces other types of gains[169] (for instance, raising awareness of third parties). Nevertheless, the uncertainty for competitors (caused by the admissibility conditions, the limited scope of review and finally, by the lack of confidence in the accurate result), may incentivize the latter to circumvent these limitations and

[169] Dalton (n 2) 97–98.

base their action on the protection of their procedural rights in order to attack Commission's Phase 1 decisions. This alternative is also particularly interesting in the context of this thesis, which points at increased risk of erroneous positive decisions adopted in the preliminary examination.

4. Action based on protection of the procedural rights as the optimal error correction mechanism

As previously mentioned, an action for annulment against State aid decisions may be introduced either on the merits or, in specific cases, based on the protection of procedural rights of the applicant. Although the action on the merits presents itself as the most comprehensive tool of error correction, as its scope is relatively broad and as it covers all types of Commission's decisions, it also raises several conundrums, which put in questions its effectiveness. In this situation, and in view of the conclusions drawn in this thesis up to now, the action against decisions not to open a formal investigation procedure has a great potential, which appears even greater in light of the recent trends in the case-law of the Court.

4.1.Protection of the procedural rights of the applicant

As an alternative to the action on the merits, the Court has elaborated a special set of conditions for contesting Phase 1 decisions, those not to raise objections and those that a measure does not constitute aid. This basis for annulment ought to circumvent the difficulties related to establishing the existence of individual concern.

4.1.1. Existence of serious difficulties as a basis for annulment

At the occasion of two judgments of 1993, the Court admitted that persons who intended to benefit from the procedural guarantees provided for by Article 108(2) should be able to challenge decisions not to raise objections in order to secure compliance with these rights.[170] In other words, the applicant may challenge a decision based on the protection of the procedural rights, from which he could have benefitted had the Commission opened a formal investigation procedure. However, the Court will not tend to favour this action over the regular action for annulment: if the applicant brings an action on the merits of the decision, the court will not interpret it as seeking, in reality, to ensure the respect of the procedural rights.[171] Conversely,

[170] C-225/91, *Matra* (1993) ECLI:EU:C:1993:239, para 17; C-198/91, *Cook* (1993) ECLI:EU:C:1993:197, para 23.
[171] C-83/09 P, *Kronoply* (2011) ECLI:EU:C:2011:341, para 55.

the Court will reject a 'disguised' plea where the applicant invokes its procedural rights while in fact contesting the merits of the decision.[172]

Within the framework of this type of action for annulment, the applicant needs to be considered as an interested party within the meaning of Article 1(h) of the Procedural Regulation – the article explicitly confers that status to competitors of the aid recipient.[173] Indeed, the 'procedural rights' referred to in the action correspond to the interested parties' right to submit comments following the opening of a formal investigation procedure. This approach has as an important implication that whenever an applicant bases its action on the protection of his procedural rights, no admissibility issues arise, as it is relatively straightforward to demonstrate one's position as a competitor of the aid beneficiary. The Court thus examines directly whether a formal investigation procedure should have been opened and therefore, whether or not adoption of the contested decision in the preliminary examination constituted an error.

4.1.2. Serious difficulties in practice

As explained in detail in Chapter 2, the notion central to the passage from the preliminary examination to the formal investigation is that of 'serious doubts' or 'serious difficulties' that the Commission encounters at the end of Phase 1. This notion is objective and requires 'investigation of the circumstances under which the disputed measure was adopted and [of] its content'.[174] The applicant needs to demonstrate the existence of doubts as to the compatibility of the measure with the internal market that the Commission should have had at the moment of adoption of the decision.[175]

In this context, the applicant may rely on the argument that the examination carried out by the Commission was insufficient or incomplete as well as on the fact that the time of the procedure considerably exceeded the time usually required.[176] As for the latter, an excessive length of the preliminary investigation alone may not, however, lead to the finding of serious difficulties – it needs to be reinforced by other factors.[177] Ultimately, there is no clear guidance as to the factors

[172] T-362/10, *Vtesse Networks* (2014) ECLI:EU:T:2014:928, para 66-78.
[173] This article defines an interested party as "any Member State and any person, undertaking or association of undertakings whose interests might be affected by the granting of aid, in particular the beneficiary of the aid, competing undertakings and trade associations."
[174] T-512/11, *Ryanair* (2014) ECLI:EU:T:2014:989, para 62; T-388/03, *Deutsche Post* (2009) ECLI:EU:T:2009:30, para 92;
[175] C-83/09 P, *Kronoply*, para 59.
[176] T-388/03, *Deutsche Post*, paras 94 and 95.
[177] T-95/03, *Asociación de Estaciones de Servicio de Madrid and Federación Catalana de Estaciones deServicio* (2006) ECLI:EU:T:2006:385, para 135; T-512/11, *Ryanair*, para 75.

which demonstrate serious difficulties, and the evaluation of this circumstance remains largely arbitrary.

As a result of this interpretation, in the period from 2010 to February 2018 3 out of 15 actions (35%) based on the protection of procedural rights led to the finding that the Commission should have opened a formal investigation procedure. This rate, which was not particularly high, could lead to three conclusions: either that Commission's Phase 1 decisions are in fact correct, that competitors lack expertise in State aid law and in the action for annulment which would allow them to justify their position, or that the Court is particularly unreceptive towards competitors' arguments and unwilling to recognise the Commission's fault. Nevertheless, it turns out to be unnecessary to try to analyse these options, since the Court's judgments from 2018 on have significantly changed the annulment rates and consequently, the evaluation of the action based on procedural rights as an error correction tool. Before this recent practice will be discussed, it is worth pointing at another potential issue concerning the scope of assessment of Phase 1 decisions.

4.1.3. Information at the disposal of the Commission and the annulment

In actions based on the protection of procedural guarantees, the issue of information available to the Commission at the moment of taking the decision may, potentially, impede the review of legality just like in the actions on the merits.

Curiously, the Court approached the question of evidence specifically within the framework of conditions for opening a formal investigation. Namely, it considered that it was not possible to undermine the validity of a Commission's decision issued in the preliminary examination, because the Commission did not dispose of some information, which it could have obtained had the formal investigation been opened.[178] In other words, if the Commission did not have access to some important information at the preliminary stage and decided not to open the formal investigation, one may not contest the decision on the basis that it was missing that piece of information. According to the Court, the opposite finding would encourage the Commission to 'systematically initiate' the formal investigation in order to be fully informed, while this would go against the division of the procedure into two stages.[179] Even though the Court's claim seems logical, it supports the decision-making in Phase 1, whose damaging consequences were discussed in Chapter 2.

[178] C-390/06, *Nuova Agricast* (2008) ECLI:EU:C:2008:224**,** para 60.
[179] ibid.

However, and more recently, the General Court annulled a Commission's decision not to open a formal investigation procedure on the basis of erroneous classification of the measure as selective.[180] In that case, the Court considered that the evidence on which the Commission had based its conclusions was unreliable and inconsistent, and must have led to a lack of information necessary to carry out a sufficient analysis.[181] This case suggests that the Court might be able to capture insufficient evidence in the preliminary examination. However, evidence in the compatibility assessment is less straightforward, inasmuch as the case-law does not provide for an unequivocal guidance as to the Court's competence. Moreover, it has been observed that the Court is more willing to maintain its broad review of the 'objective' notion of aid than to extend this review to the technical and economic compatibility assessment.[182] Despite that risk, in some recent judgments annulling Commission's Phase 1 decisions, the Court explicitly considered that the amount and character of the information should not have allowed the Commission to conclude that fulfilment of compatibility criteria did not raise serious doubts.[183] These judgments will be discussed in the next section.

4.2.Recent developments in the case-law – opening the door for competitors[184]

Given that the annulment rate of actions based on the protection of procedural rights was relatively low, an interesting change of tendency may be observed in the recent case-law of the General Court, through five cases adopted from March to December 2018.[185] In these five cases, the Court annulled Commission's decisions not to open a formal investigation, by which it almost tripled the number of annulments based on procedural rights. At the same time, the Court did not depart from its previous case-law nor adopted any particularly novel interpretations. This unheard-of result of five annulments in ten months brings the question of what has changed, in the Commission's contested decisions, applications for annulment, or the Court's assessment, for so many Phase 1 decisions to be considered as erroneous.

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[180] T-512/11, *Ryanair*.
[181] ibid, in particular paras 77-107.
[182] Merola and Derenne (n 160) 226–229.
[183] T-68/15, *HH Ferries I/S, formerly Scandlines Øresund I/S and Others v Commission* (2018) ECLI:EU:T:2018:563 (*HH Ferries),* paras 95 and 96; T-630/15, *Scandlines Danmark ApS and Scandlines Deutschland GmbH v Commission* (2018) ECLI:EU:T:2018:942 (*Scandlines*), paras 264-270; T-631/15, *Stena Line Scandinavia AB v Commission* (2018) ECLI:EU:T:2018:944 (*Stena Line*), paras 236-242; T-79/16, *Vereniging Gelijkberechtiging Grondbezitters and Others v Commission* (2018) ECLI:EU:T:2018:680 (*VGG*); T-793/14, *Tempus Energy Ltd and Tempus Energy Technology Ltd v Commission* (2018) ECLI:EU:T:2018:790 (*Tempus*); T-108/16 *Naviera Armas v Commission* (2018) ECLI:EU:T:2018:145.
[184] Parts of this section were published in: Segura Catalán, Clayton and Nowak-Salles (n 120).
[185] *HH Ferries*; *Scandlines*; *Stena Line*; *VGG*; *Tempus*; *Naviera Armas*.

4.2.1. Annulments of State aid decisions in 2018

In the cases discussed, the Court assessed the information at the disposal of the Commission in the preliminary examination and considered that the finding of lack of serious doubts was too hasty. It also spotted several inconsistencies in the decisions, which were interpreted as evidence of the existence of serious difficulties. The assessment carried out by the General Court was essentially the same as in any previous similar case, but the reluctance of the Court to adopt a conclusion unfavourable to the Commission seems to have disappeared.

In the *Tempus* judgment, the General Court proceeded to an assessment very favourable to the applicant, in which it examined in detail the scope of exchanges between the Commission and the Member State in the pre-notification phase. It attached importance to the fact that several third parties spontaneously presented their comments during the preliminary examination, and underlined that it is for the Commission, and not for the notifying State or a third party, to carry out an independent and complete State aid assessment.[186] This line of reasoning, in particular that the applicant does not have investigatory powers comparable to those of the Commission and that the latter is responsible for verifying all elements of aid from Article 107(1), has already been announced in *Naviera Armas*. Indeed, in the latter judgment, the Court found that "the Commission is required, in the interests of sound administration, to conduct a diligent and impartial examination of the complaint, which may make it necessary to examine elements that were not expressly put forward by the complainant. (…) This is especially the case where a complainant does not have the powers of investigation conferred on the Commission by Article 108 TFEU nor, in principle, its investigatory capabilities."[187]

These considerations, which put a great emphasis on the Commission's investigatory duties and the third parties' limited powers, have the potential to significantly alleviate the burden of proof, which competitors need to bear to demonstrate the existence of serious doubts. The judgment is currently under appeal and therefore, it may not yet be concluded to what extent it will influence future assessment of decisions not to open a formal investigation, especially as regards the importance of pre-notification contacts.

Moreover, reading of the Court's judgments suggests that the Commission happens to adapt its perception of objective elements to the result it wishes to achieve at different stages of the analysis. Such practice is, naturally, undesirable. For instance in *VGG*, the Commission found,

[186] *Tempus*, paras 85-116, 188.
[187] *Naviera Armas*, paras 101-102.

within the framework of the analysis concerning qualification of the measure as aid, that the secondary economic activities carried out by the beneficiaries were not necessarily related to their non-economic primary mission of nature preservation. However, already at the stage of the compatibility assessment, it was considered that the entirety of secondary economic activities constituted a "global Service of General Economic Interest" (SGEI). The Court considered that it is not possible to assume that secondary activities carried out by the beneficiaries automatically form part of the SGEI and that therefore, the Commission could not conclude that they were necessary for the functioning of the SGEI.[188] This erroneous assumption led to insufficient examination of the question of overcompensation.

A Commission's assessment varying from one part of the decision to another was also the case in *HH Ferries.* The Court annulled the decision for several reasons, one of which being that it provided no explanation of why the State guarantees were to be considered as aid schemes, in particular how the aid contained in the guarantees satisfied the condition that the aid must not be linked to a specific project.[189] Similarly to *VGG*, the Commission considered, within the framework of assessment under Article 107(1) TFEU, that the aid resulting from State guarantees was not linked to a specific project, but within the framework of the assessment under Article 107(3) it contradicted itself by finding that the measures related to a 'specific, precise and clearly defined' project.[190] In that regard, the Court even recurred to the dictionary definition of 'specificity' in order to demonstrate that the project in question undoubtedly was specific.[191] This error cost the Commission annulment on the basis that the examination was insufficient and incomplete.

Finally, in three cases concerning Danish Fixed Links (*HH Ferries*, *Stena Line* and *Scandlines Denmark*), the Court considered that the Commission could not have found that the guarantees granted by Denmark and Sweden were compatible with the internal market, since the conditions for their mobilisation simply were not known when the decision was taken.[192] In the same cases, the Commission failed to properly identify, and distinguish between, construction and operating costs, while it conducted the analysis with regard to the project in its entirety: by definition, such analysis was incomplete.[193]

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[188] *VGG*, paras 118-137.
[189] *HH Ferries*, paras 75 and 76.
[190] ibid, para 79.
[191] ibid, para 80.
[192] *Scandlines*, paras 264-270; *Stena Line*, paras 236-242; *HH Ferries*, paras 95 and 96.
[193] *Scandlines*, paras 240-245; *Stena Line*, paras 206-216; *HH Ferries*, paras 105-117.

The reasons underlying the trend for annulment of decisions have not been communicated by the Court. One answer might be a lower quality of Commission's decisions adopted in the recent years, which triggered a more intensive review by the Court, but any similar research would require both big resources and a high level of arbitrariness. Suffice it to say that the decisions analysed by the Court do not stand out, in terms of their length and content, from typical decisions not to open a formal investigation procedure; they also do not raise any new legal points that could be of particular interest to the Court. All decisions concern totally different measures, are based on different State aid guidelines and, in fact, have nothing in common aside from the fact that they were all annulled. It is possible that the more critical analysis of the decisions is related to the expansion of the General Court – this conclusion may not, however, be made without confirming that trend in the judgments to come.

4.2.2. The Commission's obligation to search for relevant information

As regards the information the Commission shall gather in the preliminary examination, and whose absence might constitute a basis for annulment, it is interesting to refer to the judgment of the General Court in *Tempus*. The Court considered that when demonstrating the existence of serious difficulties, the applicants "*may rely on all relevant information that was or could have been available to the Commission on the date when it adopted the contested decision.*"[194] The Court deduced it from the Procedural Regulation and from the previous case-law, without referring to any new legal basis or any general principle. However, such an extensive interpretation of the material on which the Commission shall base its decision is a novelty and has not appeared in previous judgments. It gives the applicant the possibility to justify the claims by reference to information which, although the Commission did not possess at the moment of taking the decision, would have been obtained had a diligent investigation been carried out.

However, a reference to all relevant information which "*could have been available*" is problematic from the perspective of identifying the information that might realistically have been available to the Commission and eliminating that which the Commission could not reasonably gather. Such an exercise might be fair to applicants in straightforward cases in which the Commission ignored an important piece of information signalled by interested parties but might prove arbitrary if an applicant accuses the Commission of not thinking of a certain potentially important issue. In this context, such an approach, if applied widely, might tend to

[194] *Tempus*, para 72.

blur the boundary between the preliminary examination as allowing to form a preliminary view on the measure and a full examination reserved for the formal investigation. Indeed, it is not Commission's duty to reach all available information at the preliminary stage, as it is the function of Phase 2. Moreover, as previously stated by the Court with regard to the compatibility assessment, "*it cannot be complained that the Commission failed to take into account matters of fact or of law which could have been submitted to it during the administrative procedure but which were not, since the Commission is under no obligation to consider, of its own motion and on the basis of prediction, what information might have been submitted to it*.[195]" The judgment in *Tempus* contradicts this finding in that it refers to some body of information 'potentially available' to the Commission.

The ambiguous nature of this approach lies in the fact that it extends the assessment from the existence of serious doubts in light of the information at hand, to the desirable scope of information at hand itself. Although it might increase competitors' chances of success and targets the problem of informational asymmetries, it brings the practical dilemma on how much information must be gathered by the Commission in each individual case before it gets too costly and unjustified considering the division between two procedural stages. This observation sends us back to the suggestion developed in Chapter 2, according to which it is necessary to define the exact scope of the preliminary examination: in its absence, it is difficult to impose limits on the Commission's duties in information gathering and further, to sanction its decisions on that basis. Alternatively, the Court could assume the role of defining the scope of Phase 1 assessment by using the benchmark of serious doubts to distinguish between sufficient and insufficient preliminary examination, and therefore clarify the standard of proof in the administrative procedure.[196]

On the other hand, from the contested decision in the *Tempus* case, where the Commission relied virtually solely on the information provided by the Member State and did not truly investigate the measure on its own, it might be deduced that the Court conceived "*all available relevant information*" mainly in the context of third parties coming forward to the Commission and drawing its attention to circumstances related to essential elements of assessment. When read in the specific context of *Tempus*, the judgment clearly targets the situations where the applicants challenge a blatantly negligent Commission's investigation. The Court of Justice will

[195] *Naviera Armas*, paras 99 and 100.
[196] Craig (n 8) 474.

certainly have an opportunity to clarify or further interpret the required standard for the Commission's investigation.

4.2.3. The promising aftermath of the five annulments

Five annulments in a row constitute an unprecedented result and clearly raise the competitors' chances of succeeding whenever they apply on the basis of protection of their procedural rights. If the Commission takes on board all the considerations made by the Court, it might be obliged to change its procedural habits in evaluating measures as well as to elaborate on new arguments to raise before the Court in order to defend its decisions. From a broader perspective, this may only lead to a higher quality of State aid assessment, related to tougher assessment by the Court and the corresponding higher risk of annulment of low-quality decisions. Although some issues still need to be clarified and the tendency needs to me maintained in order for it to procure real impact on the quality of Commission's decisions, these changes definitely are positive from the point of view of controlling the preliminary examination of State aid cases. Importantly, the Court's criticism of the Commission's attitude whenever it was reflected in superficiality or incoherence of assessment signals that the quality of State aid control is well under the Court's radar. If the Commission wishes to conclude that no doubts persist as to the measure, it needs to present a coherent and logical line of reasoning. Although such requirement appears obvious, it is only in 2018 that the Court expressed it.

4.3. Control of decisions not to open a formal investigation as an efficient error correction tool

The above description of the action based on the protection of procedural rights of competitors, together with an increased rate of annulments in the recent months, invites one to consider this type of action as a modest but reliable means of error correction of State aid decisions. Indeed, having the Court more intensively review actions on the merits turns out to be unnecessary in the context of decreasing the expected cost of error. It is because, as explained extensively in Chapter 2 of this thesis, the main risk of errors in State aid assessment is situated at the level of the preliminary examination, in which 97% of State aid decisions are made. Moreover, the action tailored to address specifically erroneous non-openings of formal investigation procedures allows to avoid many limits of the action on the merits, such as admissibility and the scope of review.

4.3.1. Superiority to the action on the merits

Indeed, the action on the protection of procedural rights presents a number of advantages which an action on the merits does not have. Clearly, the admissibility issue is absent since the status of an interested party within the meaning of Article 1(h) is relatively uncontroversial. In addition, the chance for annulment of such an action is higher than for those based on the merits of the decision – 36% as compared to 8%.[197] Certainly, it is better to contest a decision not to open a formal investigation than the assessment itself, even though it is still to be confirmed whether competitors will be given long-term incentives to trigger the judicial review and the Commission to raise the quality of its decisions.

Furthermore, this type of action targets the quality of the Commission's preliminary assessment in terms of sufficient own investigation and possible ambiguities brought up either by third parties or stemming from the information at the Commission's disposal. Consequently, it focuses on the precise problem identified in the thesis and this risk only. The aim of control may be well observed in the recent judgments by which the Court annulled Commission decisions: the content of the decisions, by its superficial and incomplete character, suggested that the difficulties could not be overcome in the preliminary examination.

Another advantage of the action based on procedural rights is that the Court does not risk making new errors due to the lack of expertise: the core assessment stays with the Commission which is, without doubt, better equipped to assess measures falling under Article 107. At the same time, the notion of serious doubts is sufficiently flexible to allow the Court to go relatively deep in the content of the Commission decision, as long as the analysis consists in spotting elements hinting at the existence of difficulties and not in evaluating the measure itself. The fact that the scope of assessment is adapted to the Court's competences is a factor justifying this action as a desirable review mechanism.[198] Moreover, even provided that the Court unnecessarily forces the Commission to open a formal investigation that ultimately leads to a positive decision, the resulting costs are lower than those in the case of an erroneous judgment on the merits. In particular, these costs are mainly procedural, but are not related to an erroneous approval or rejection of a measure on the substance (which would cause, for instance, disturbances on the market).

[197] For actions on the protection of procedural rights: 8 out of 22, and for actions on the merits: 2 out of 23.
[198] This element being considered as one of those justifying the existence of the appeals process as an error correction mechanism: Dalton (n 2) 96–97.

Similarly, a decision adopted after a 'forced' formal investigation may, of course, be positive. Indeed, two out of three formal investigations opened after annulments of Phase 1 decisions led to positive decisions;[199] the remaining investigation was opened only in 2016 following a dismissed appeal, so no final decision has been adopted yet.[200] When the final decision is positive, the annulment might seem only to entail costs related to bringing and assessing the action for annulment and carrying out a formal investigation, without any benefit from triggering the error correction procedure. This problem overlaps with the problem of legal considerations in the action on the merits, which may spot procedural errors without impact on the desirable or undesirable character of the measure. Again, these costs would be compensated by an increased quality of Commission's decision-making as well as values such as increased transparency, legal certainty, legitimacy and, very importantly, potentially more active participation of competitors in State aid judicial procedure. Due to the low number of annulled Phase 1 decisions (8, out of which 5 are too recent to lead to final decisions), it will be interesting to observe the final outcomes in the cases annulled by the Court in 2018.

4.3.2. Action against Phase 1 decisions as decreasing the expected cost of error

A well-functioning control of Phase 1 decisions would allow to lower the expected cost of error by decreasing both the probability and the cost of error. Indeed, even if the probability of error remained the same, the cost of error would decrease to that of annulling an erroneous decision not to open a formal investigation, instead of the harm inflicted by the undesirable measure. More specifically, the cost would correspond to that of the judicial procedure as well as that entailed by the disappearance of the initial positive decision (especially if the aid was already granted on that basis). As regards the cost of an undiscovered error as compared to the cost of an annulment, the very existence of judicial review necessarily bears the assumption that the benefit from annulment of an erroneous decision is higher than the cost suffered if this decision is maintained. It is not the object of this thesis to reflect on whether the benefits of the judicial review in the European Union exceed its costs.

[199] Commission Decision of 25.7.2012 on State aid case SA.29064 (2011/C, ex 2011/NN) Differentiated air travel tax rates implemented by Ireland, following annulment in case T-512/11, and Commission Decision of 5.7.2016 on State Aid SA.19864 - 2014/C (ex 2009/NN54) implemented by Belgium Public financing of Brussels public IRIS hospitals, following annulment in case T-137/10.

[200] Annulment in case T-89/09, *Pollmeier Massivholz v Commission* (2015) ECLI:EU:T:2015:153, maintained on appeal in joined cases C-246/15 P and C-242/15 P.

Certainly, basing an action for annulment on the existence of serious difficulties may be more accessible and attractive to competitors than attacking the merits, in terms of their ability to participate in error correction. Indeed, resources required to introduce an action on the merits (even beyond the admissibility problem), which aims to undermine the accuracy of a substantive analysis, may discourage competitors, who generally are not experts in State aid issues. On the contrary, an action against non-opening of a formal investigation is easier to construct, as it aims to spot incompleteness and inconsistencies in the reasoning rather than to offer an alternative assessment. Therefore, if competitors should adopt a more active role in spotting errors, the action referring to their procedural rights could allow to effectively involve them in State aid procedure while contributing to the building of State aid culture.

Curiously, notwithstanding the fact that the action on procedural rights evidently is linked to the probability of error in the preliminary examination, it does not seem the Court conceived this action as a response to accuracy concerns. Indeed, nothing in the initial or later judgments, nor in opinions of the Advocates General, suggests that competitors are expected to spot erroneous approvals as such, since the reasoning was based strictly on the fact that a non-opening of a formal investigation deprives the interested parties of the right to submit comments.[201] Once the procedural documents of these two landmark cases (*Matra* and *Cook*) will have become public in 2023, it will be possible to verify whether this type of argument was ever submitted by any of the parties; as for now, either nobody related the simplified access to the Court to the probability of decisional errors or the Court ignored such concerns in the judgments. Therefore, one's guess may be that had a higher degree of participation of competitors in the preliminary examination been foreseen, this basis for an action for annulment would have never been created. Hence, lowering the expected cost of error is a fortunate side-effect of the protection of procedural rights.

In sum, the action based on the protection of procedural rights offers precisely as much as is needed to remedy the problem identified in this thesis: increase the quality of Commission's assessment in the preliminary examination and allow the Court to impose on the Commission the opening of a formal investigation whenever the decision is erroneously adopted in Phase 1. The analysis of the case-law on that matter, especially the recent one, gives basis to consider that there exists a promising framework designed to address non-openings of Phase 1. Now, in

[201] C-225/91, *Matra*, para 17; C-198/91, *Cook*, para 23.

order for this framework to effectively fulfil its function, competitors need to bring more actions for annulment in order to allow the Court to control Commission's decisions. Indeed, the problem of active participation of competitors in State aid control seems to become essential problem of error correction, which may leave even the best error correction mechanism unexploited.

4.4. The need for competitors' action

Even though the possibility to contest Commission positive and negative decisions is provided in the Treaty, the review of these decisions remains marginal. Indeed, out of 4515 decisions issued by the Commission in the period from 30th August 2008 to 30th July 2018,[202] the General Court controlled, following actions for annulment, the legality of only around 75, that is 1,7% of them.[203] These statistics, even more disappointing for positive decisions, raise the question of whether error correction through the action for annulment is reality, and what is the actual impact of the favourable evolution of the Court's interpretation when litigation is almost inexistent.

4.4.1. Disproportionality in the review of positive and negative decisions

It is interesting to distinguish between the contested decisions according to their outcome, i.e. between positive and negative decisions. This analysis reveals a remarkable disproportion in litigation against the two types of decisions.

Indeed, out of 4717 positive decisions, actions for annulment were brought by competitors only against less than 50 decisions. Due to the limited number of actions themselves, as well as rejections on the grounds of inadmissibility, overall the General Court examined the legality of less than 0,4% of all positive decisions. In the same period, the Court proceeded to the review of legality of negative decisions (all actions have been declared admissible), representing around 40% of 173 negative decisions issued by the Commission.[204]

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[202] The choice of the starting date allows to include decisions issued after State Aid Action Plan was implemented: the last document, the General Block Exemption Regulation, entered into force on 30th August 2008. The choice of the ending date is motivated by the average duration of a procedure before the General Court in State aid cases – 25 months. This period was deducted from the date, on which this chapter is written, i.e. 5th May 2020, in order to exclude from the statistics the cases, which could not yet be examined by the Court.

[203] Statistics based on information available on the Commission's Case search website, http://ec.europa.eu/competition/elojade/isef/index.cfm and curia.europa.eu.

[204] The study was conducted on the basis of information available at curia.europa.eu and Commission's Case search: http://ec.europa.eu/competition/elojade/isef/.

Therefore, the disproportion is double: first, much fewer actions for annulment are brought against positive than against negative decisions. Second, less actions against positive decisions are examined by the Court as to the substance: some of the actions against positive decisions are declared inadmissible, which does not happen in the case of actions against negative decisions. Consequently, much fewer actions brought against positive decisions adopted by the Commission result in an annulment.

This conclusion is inconsistent with the observation made in Chapter 2, according to which the probability of an erroneous positive decision is higher than the probability of an erroneous negative decision, so that especially Phase 1 decisions require increased strengthened control. Taking into account that the annulment rate of actions brought against positive decisions is relatively high (with 50% of contested decisions not to open a formal investigation procedure annulled), the lack of actions becomes the central problem of this error correction mechanism.

4.4.2. Lack of litigation as a problem of the error correction mechanism

As demonstrated, even taking into account actions rejected for inadmissibility, competitors very rarely trigger judicial review: less than 0,4% of Commission's positive decisions were challenged in the reference period. One could suggest that the lack of litigation is not problematic because it demonstrates either that Commission's decisions are not flawed, or that competitors are not negatively affected by decisions, and thus even if errors occur, they are not more costly that the judicial review itself. Nevertheless, such a conclusion would be premature. The literature does not provide the answer why competitors are inactive in contesting Commission decisions, but different possible scenarios may be identified.

First, the relatively low annulment rate until 2018 (just like the high rate of actions on the merits rejected for inadmissibility) might have contributed to keeping competitors away from challenging decisions. Taking into account that the unsuccessful party will bear the costs of the proceeding,[205] private actors may simply lack incentive to bring an action. Increasing the probability of submitting a successful action for annulment, for instance by being more inclined to annul decisions or at least carefully examining actions, might raise the expected benefit and encourage competitors to come forward.

Second, competitors may have limited knowledge about adoption of State aid decisions, especially those not to raise objections, which are only very summarily mentioned in the

[205] Rules of Procedure of the General Court, Article 134(1).

Official Journal. The two-month period for bringing an action for annulment may prove too short to obtain information about the case and prepare an action. Adding to that fact, the practice shows that undertakings are not necessarily familiar with complex State aid issues and rarely have in-house State aid lawyers, so they need to use services of professionals from the field on an *ad hoc* basis. Therefore, the cost of analysing and bringing an action, and even of identifying the potential legal issue, may be high as compared to the expected benefit.

Finally, even if consequences of an erroneous decision on a competitor are not always obvious (especially shortly after the decision is adopted), it has been observed earlier in this thesis that errors bring costs beyond a negative impact on the situation of an individual competitor. As pointed out by EU courts, State aid provisions pursue a broader objective of undistorted competition in the internal market,[206] and prevention of distortive aid is carried out in the interest of both consumers and the European economy.[207] Still, somebody has to act to prevent this overarching negative result from taking place.

However, when there are many operators on the market, the effects of a medium-size aid to a medium-size competitor may be spread across many competitors and may not have a significant immediate effect on their situation. Especially investment aid is designed to procure medium- and long-term effects, and may gradually worsen competitors' market position and consumer welfare. If a competitor estimates that effect within two months after the adoption of the Commission's decision, he may not find the harm as high as to apply for annulment. To put it differently, a State measure may not have a remarkable effect on potential applicants (and thus the benefit expected from annulment is not very high) but it may still produce negative consequences on the overall functioning of the internal market, especially in the long term. This effect has a chance of being captured only if a competitor is given a proper incentive to contest the decision, for instance through a looser admissibility standard that conditions the win upon the strength of the case and not principally upon its procedural aspects.

Therefore, the fact that an action for annulment has not been brought against a positive decision implies neither that the decision was correct, nor that the costs of the potential error are low.

The lack of actions for annulment originating from competitors is not reassuring, on the contrary – it is alarming. In particular, competing undertakings are the only guardians of the

[206] Joined cases C-75/05 P and C-80/05 P, *Kronofrance* (2008) ECLI:EU:C:2008:482, para 66; T-49/93, *SIDE* (1995) ECLI:EU:T:1995:166, para 72; C-225/91, *Matra*, para 42.
[207] SAAP, paras 5-6.

sound analysis of positive, and in particular Phase 1, decisions. Naturally, neither the Member State concerned nor the beneficiary undertaking would contest the finding that a measure may be granted – they may contest classification of the measure as aid in a positive decision, or commitments imposed in a conditional decision,[208] but not the approval as such. The practice shows that other applicants privileged under Article 263 – the Parliament, the Council and even other Member States – also do not initiate the judicial review.

This perception of competitors as the only actors charged with spotting errors would be perfectly in line with the instrumental paradigm (as opposed to the legal protection paradigm), which underlies involvement of competitors in State aid procedure.[209] Indeed, the wish to increase participation of competitors in error correction is dictated by the added value they could bring to the project of the effective State aid enforcement, and not by protection of competitors as such.[210]

When competitors do not, for some reason, bring that added value, the action for annulment may not fulfil its functions. First, it is straightforward that the costs of error may not be removed and second, the impact of the judicial review on the decrease in the probability of error is much weaker. Indeed, whenever lodging an action against an erroneous decision is uncertain, the Commission's incentives to increase the quality of decision-making are diminished, because it evaluates the risk of annulment taking into account the number of actions brought.[211]

Consequently, an effort should be made to enhance participation of competitors in putting in light errors in Commission's decisions. The developments in case-law, such as in the *Montessori* case and in annulments of Phase 1 decisions in 2018, should already contribute to an increased interest in State aid litigation. On the other hand, it seems necessary to familiarise private actors further with EU State aid law, increase their awareness and enable them to effectively control Commission's decisions, in their own and in the EU interest. In that regard, education seems essential. Interestingly, the lack of expertise of competitors and the need for education naturally links the action for annulment with enforcement of State aid law under the GBER, which turns out to share the same problem. The GBER will be the object of analysis in

[208] E.g. C-133/12 P, *Stichting Woonlinie* (2014) ECLI:EU:C:2014:105; T-319/11, *ABN Amro* (2014) ECLI:EU:T:2014:186; T-296/97, *Alitalia* (2000) ECLI:EU:T:2000:289.

[209] Fernando Pastor Merchante, 'The Role of Competitors in the Enforcement of State Aid Law' (European University Institute 2014); *Case 1179/2014/LP on the involvement of "interested parties" in State aid investigations carried out by the Commission* (European Ombudsman), para 33, where Ombudsman considers third parties to be "information sources only."

[210] The latter approach would direct the discussion towards competitors' fundamental rights.

[211] Shavell (n 1) 23–24; in a similar vein, considering the limits to the impact on judges' incentives to self-correct: Dalton (n 2) 92.

the next chapter and will allow to get back to the competitors' awareness in this thesis' conclusion.

5. Conclusion

This chapter discussed the third element composing the analysis of the expected cost of error in State aid enforcement by the Commission, namely error correction mechanisms. It distinguished itself from the rich existing literature on judicial review by taking a law and economics angle rather than the dominating angle of protection of fundamental rights in EU law, or purely economic but not EU-oriented U.S. scholarship.

More specifically, it asked whether errors potentially occurring in the administrative phase may effectively be detected and eliminated by the Court. It was concluded that the action for annulment is the most reliable option, and some analysis and suggestions with regard to that action were provided. In particular, the action on the merits presents several shortcomings, which are difficult to address only from the State aid perspective. The strict admissibility standard, although partially resolved through the *Montessori* judgment, still needs to be mitigated for individual aid in order to ensure real access to justice. Moreover, the limited scope of review, which leaves aside complex economic and social considerations (so often the core of State aid assessment), accompanied by ambiguous level of expertise of the judges, in practice mean that the assessment of the Court might be incomplete or incorrect. A solution could be an increased use of experts and higher requirements towards the statement of reasons.

However, the action based on the protection of the applicants' procedural rights presents itself as the most reliable and efficient option to eliminate erroneous decisions not to open a formal investigation. Provided that the Court maintains its recent trend of strict assessment of Commission's decisions as well as that competitors take use of this option on a more regular basis, one might hope for a decrease in the expected cost of error, both at the level of the probability of an error occurring and through reduction of the costs of errors.

Two points certainly emerge from the above analysis, which determines the effectiveness of the action for annulment as an error correction tool. First, one may not ignore the changes in case-law, which started in 2018 and may potentially revolutionise the effectiveness of actions brought by competitors. Consequently, and even though this optimism will have to be confirmed in upcoming judgments, one may not argue that competitors are deprived of means to make their doubts known to the Court. Second, the fundamental though complicated

objective becomes to raise awareness of competitors and reinforce their participation in the procedure. Indeed, although error correction mechanism rests on their shoulders, the litigation against positive decisions remains minimal, almost unobservable against the background of the Commission's robust decision-making. In other words, one may consider that the framework for error correction is accomplished but it needs to be filled with actions.

The analysis of error correction mechanisms is the final, after lowering down the probability of error and identifying the cheapest type of error, area in which to seek to decrease the expected cost of decisional errors made by the Commission in State aid assessment. However, the analysis would be incomplete without taking into account the State aid reform consisting in delegating a significant part of enforcement towards national authorities.

Indeed, the decentralisation of State aid enforcement accomplished via State aid Modernisation and the 2015 General Block Exemption Regulation naturally leads to the question of whether national authorities will be able to secure as correct, or even more correct, outcomes as the Commission. Indeed, many error-related issues are determined at the level of the design of State aid enforcement, when choosing the authority that will apply the law as well the exact rules that will be applied. Possibly, the expected cost of error is lower under enforcement by national authorities than under enforcement by the Commission – lowering this cost could therefore be achieved by delegating more power to the Member States. On the contrary, if the expected error is high and remains unaddressed, it might potentially compromise achievement of the reasons for decentralisation. Hence, this angle of analysis of the GBER imposes itself in order to discuss the future of error in State aid enforcement, in particular against the above background of the Commission's error-making in its administrative procedure.

Chapter V – The expected cost of error in light of decentralisation of State aid enforcement

1. Introduction

The previous chapters of this thesis focused on State aid enforcement by the Commission, i.e. on the administrative procedure consisting in assessment under Article 107 TFEU whenever the notification is mandatory. Nevertheless, it is essential to recall the effect of State Aid Modernisation (SAM) and of the adoption of the new General Block Exemption Regulation,[1] whose aim is to decentralise the enforcement by exempting a large part of measures from the notification obligation. Indeed, the ambition is that the GBER covers up to 90% of aid granted by Member States and 2/3 of total aid amounts,[2] and according to 2018 State Aid Scoreboard, measures falling under the GBER already constituted over 80% of all State aid cases which amount to 48% of the Member States' total spending.

Conferring upon Member States more power in enforcement of State aid law does not mean that error in the Commission's decisions loses importance. On the contrary, enforcement left with the Commission refers to the most distortive measures with significant impact on the market.[3] Although cases may be less frequent, they exert higher influence both in terms of their amounts and in terms of interpretation of State aid provisions by the Commission, as "it is a reasonable guess that the social cost of an erroneous outcome will generally rise with the stakes in the case."[4]

Nevertheless, the fact remains that a vast majority of State measures now fall outside the scope of traditional assessment and are assessed by national authorities. Hence, the central question becomes that of whether the GBER measures are accurately qualified by national authorities as exempted from notification, or whether potentially problematic measures that should be notified are too hastily approved and granted. Therefore, error in enforcement of the GBER consists in erroneous consideration that the criteria for exemption are fulfilled (Type 2 error), or erroneous finding that a measure should not be exempted resulting in unnecessary notification to the Commission (Type 1 error). Naturally, a Type 1 error is not definitive, and does not in itself produce any significant negative effects, because the Commission may

[1] Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (GBER).
[2] http://europa.eu/rapid/press-release_MEMO-14-369_en.htm - "What will be the impact of the GBER?".
[3] State aid action plan - Less and better targeted state aid: a roadmap for state aid reform 2005-2009, COM/2005/0107 final (SAAP), para 35; SAM, para 19.
[4] Richard A Posner, *Economic Analysis of Law* (Wolters Kluwer Law&Business 2007) 22.1.

subsequently find the measure compatible and adopt a correct positive decision. This error may be compared to an unnecessary opening of a formal investigation procedure by the Commission. However, an accurate assessment by the Member State would allow one to avoid the costs related to notification and the risk of potential error made by the Commission, thus leading to a better allocation of resources.

In order to reflect on accuracy in enforcement of the GBER, one may use the same benchmarks as for the centralised procedure. Therefore, in order to assess the overall cost of error, one can focus first on the probability of error, which is strongly related to the choice of rules and the costs of error. Second, one can look at error correction mechanisms, which should allow to lower the other two previous variables. Therefore, the present analysis will endeavour to transpose the scheme applied in the previous chapters to the enforcement under the GBER. It will therefore be structured as follows. Section 2 will explain the reasons behind adopting the GBER and the risks brought by its erroneous application. Section 3 will follow with observations on the probability of error and the optimal assessment rule, followed by those on costs in Section 4, and on error correction mechanisms in Chapter 5. Section 6 will contain the conclusion.

2. Gains from the GBER versus the expected cost of error

The use of the GBER is mandatory, in the sense that there is no choice between application of the GBER and notification: the Commission will not evaluate the notification of a measure which falls under the GBER. This clear division of competences between the national authorities and the Commission raises the question of whether accuracy in assessment of State aid is guaranteed, and in the first place, what benefits are expected to be derived from decentralisation.

2.1. The rationale for the GBER

The GBER changes the design of EU State aid control because it exempts Member States from the notification obligation with regard to certain measures. It does not affect qualification of measures as aid under Article 107(1) TFEU but only their compatibility with the internal market under Article 107(3).

Indeed, it results from the Commission's enforcement experience that some categories of measures, although constituting aid, are generally compatible with the internal market if they fulfil certain pre-defined requirements. Following that finding, there is no need for the

Commission to carry out individual assessment in such cases, especially if the pre-defined compatibility criteria are simplified to the extent they should successfully be applied by the Member States. This further means that measures identified as typically harmless may be granted without prior approval at the Commission's level, and that the related *ex ante* State aid assessment is shifted to the granting Member State. Consequently, a State that designs a measure needs to, as previously, answer the question of whether the measure constitutes aid and additionally, it must decide whether the aid fulfils the criteria laid down in the GBER so that it may be granted without notification. The Commission does not intervene to verify the correctness of such evaluation, and it only monitors overall enforcement of the GBER *ex post*. Hence, enforcement of State aid law is ensured, within the limits established by the GBER, virtually exclusively by Member States.

The GBER presents obvious advantages, and its adoption was considered to be necessary in order to address the increased workload of the Commission following EU's enlargements. It allows the Commission to focus on the most problematic cases and aid beneficiaries to receive needed aid within shorter delays, and this without compromising the quality of the EU system of State aid control. Indeed, decentralisation does not mean that less distortive measures are out of control. On the contrary, their distortive effects are still controlled except that this control is more efficient, because it allows the EU to fully exploit the potential of different enforcing authorities. It is, on the one hand, the potential of the national authorities, which are able to carry out a simplified assessment and on the other hand, that of the Commission, which is better-suited to analyse complex and potentially harmful measures that must be assessed on a case-by-case basis within reasonable time-limits. Hence, one of benefits of the GBER may be measured in terms of resources becoming available to the Commission in order to assess potentially more distortive measures. Without adding error to the picture, decentralisation is therefore just a technical exercise of shifting competence from one authority to another,[5] which allows to increase efficiency. By optimising State aid enforcement, the GBER shall reduce its overall cost. This benefit constitutes the very reason for establishing the GBER and is expected to be obtained without taking accuracy concerns into account.

If one analyses the shift in competences in terms of accuracy, two aspects may be singled out. First, it is straightforward that if the Commission is released from assessment of some measures, it disposes of more resources to devote to the remaining notifiable ones, and these resources

[5] Piotr Podsiadło, 'Efektywność Udzielania Pomocy Publicznej w Państwach Członkowskich UE – Mit Czy Rzeczywistość?' (2016) 15 Problemy Zarządzania 65.

should translate into better-quality assessment and higher accuracy. While the Commission in the GBER did not raise the objective of increased accuracy, it is the only plausible aim it must have had in mind: if the GBER will allow the Commission to focus on assessment of most distortive measures, it is suggested that before the GBER, the Commission lacked resources to properly examine such measures. Had accuracy been guaranteed already before the GBER, the newly saved resources would rather be directed somewhere else. Without concluding on whether the Commission self-assessed its previously existing lack of resources, relief from examination of simple measures should in any case result in higher accuracy of the remaining measures.

The second, and less straightforward potential benefit of the GBER may be obtained if the national authorities are more accurate in their assessment than the Commission under the notification procedure. In other words, the same measure assessed by a national authority may be more accurately evaluated than if it was examined by the Commission. For instance, it could be argued that assessment of the GBER measures is split between 27 national authorities, so that each of them devote more attention to individual evaluations, which may be expected to result in higher accuracy. Naturally, as it will be demonstrated below, such claim is not obvious and depends on various elements, such as the expertise of the national authority, its good will to truthfully assess measures, and the cost of error. In any case, although this potential benefit of the GBER is not mentioned by the Commission, it is logical that the success of the GBER depends on whether it will be correctly applied by national authorities.

It has been argued by the Commission that loosening up the notification requirements must go hand in hand with "an increased commitment and delivery on the part of the national authorities in terms of compliance."[6] Although the Commission consistently avoids the words 'error' and 'accuracy', it is obvious that the project of decentralisation does not make sense if it the GBER is misapplied and the distinction between notifiable and non-notifiable measures is not respected. Indeed, if the expected cost of error in the enforcement of the GBER is too high, then there might be no point of having the GBER in the first place. This fundamental role reserved for error in assessment of the efficiency gains brought by the GBER will be explained in the following section.

[6] SAM, para 21.

2.2.The expected cost of error under the GBER

The GBER may, as it was shown above, result in two types of benefits: first, national authorities more accurately enforce the GBER than the Commission enforces its guidelines, and second, the Commission becomes more accurate in the assessment of measures which are kept under the notification procedure. The expected cost of error, in line with how it has been defined in the previous chapters, represents the probability of error multiplied by its cost: for now, this final result will be discussed, while its two components will be uncovered further in this chapter.

Provided that the costs of the decision-making are the same under both regimes, if the expected cost of error under the GBER is lower than the expected cost of error in assessing the same measures by the Commission, then the use of the GBER allows to decrease the expected cost of error in State aid assessment. The question is who will enforce a given measure with more accuracy or whose errors are less costly. To put it differently, application of the GBER instead of the notification procedure may ideally prevent some errors from being committed or may result in cheaper errors so that the expected cost of error in State aid enforcement gets lower overall.

In addition to this static comparison of the expected cost of error under the GBER and under the traditional assessment, the simple existence of the GBER may lower the expected cost of error made by the Commission. As it was already signalled in the preceding section, decentralisation, by freeing Commission's resources, may decrease the rate of errors because lower quantity of decisions shall result in higher quality of assessment. This positive result could be achieved even without changing the assessment criteria, which was suggested in Chapter 2.

Moreover, if the GBER has such a positive influence on the accuracy of the assessment by the Commission, then the overall expected cost of error in State aid assessment might be lower with the GBER even if the initially analysed expected cost of error is higher under the GBER than under the Commission's administrative procedure. Indeed, gains from the lowered expected cost of error made by the Commission might compensate for higher expected cost of error made by national authorities.

2.2.1. Three scenarios to compare the expected cost of error

Therefore, the effects of an error may be analysed under three scenarios, based on a comparison between accuracy in the Commission's assessment and accuracy in the assessment under the GBER. The scenarios are the following: 1) the expected cost of error made by the national authorities is lower than if the Commission assessed the same measures, 2) the expected cost of error may be considered to be the same both under the GBER and under the notification procedure, and 3) the expected cost of error in enforcement of the GBER is higher than if the measures were left under the notification procedure. Such expected costs should be weighed against the entirety of expected benefits derived from the GBER (better distribution of resources), which could not be achieved under the traditional notification procedure, and which inspired the creation of exemptions in the first place.[7]

Therefore, scenario 1 is the most desirable because the national authorities make rarer or cheaper mistakes than the Commission, so beyond the benefits from better allocation of resources, also higher accuracy brings its benefits. Scenario 2 is neutral, so the benefits from the GBER may be obtained as planned. In these two cases, error does not put in danger the gains expected from the GBER. In contrast, under scenario 3, error compromises those gains, because they are decreased by the costs of inaccurate enforcement, that could be correctly carried out by the Commission.

Whatever the scenario, lowering the expected cost of error under the GBER is desirable. While under scenarios 1 and 2 this is in order to further increase the benefits obtained from the GBER (because scenario 2 may eventually become the more beneficial scenario 1), under scenario 3 it is more urgent because inaccurate enforcement may limit or even cancel out the original expected benefits underlying the decentralisation. Since it is, of course, impossible to measure exactly which scenario is currently in place (also because it is not known to what extent the potential error was already calculated in when designing the GBER), one may analyse, on a more abstract level, different components of the expected cost of error under enforcement by national authorities.

[7] It must be assumed that the GBER brings the benefit of more efficient assessment, which exceeds the costs borne at the national and European level in order to have it in place (e.g. related to adaptation of national structures or monitoring). The pertinence of this assumption lies outside the scope of this thesis, because it is not related to errors.

2.2.2. Focus of analysis

In this thesis, the expected cost of error in enforcement under the GBER will be analysed as an alternative to assessment of the same measures by the Commission. This angle of analysis merits three remarks.

First, while the analysis for the Commission was concentrated around the question of how to possibly lower down the variables in the expected cost equation, the assessment under the GBER has to it a different aspect – that of comparison, which is supposed to tell us whether it is cheaper to have the Commission or the Member States err. This is why the conclusion will refer to the outcome of the same assessment of the notification procedure. Furthermore, the expected cost of error shall be weighed against the efficiency gains which triggered the creation of the GBER (freeing Commission's resources), which is essential for evaluating whether the GBER is a success.

Second, one may not know what the expected cost of error would be if the GBER measures were assessed by the Commission, precisely because this assessment is not carried out by the Commission. However, the analysis in the previous parts of this thesis gives some insights into possible obstacles to an effective enforcement of State aid law and suggests where to look for improvements.[8] It is against this background that features of the GBER will be assessed in the context of the probability of error, cost of error and error correction. The analysis will lead to discover the main features of enforcement of the GBER in order to compare the conclusions, suggestions and challenges to those concerning enforcement by the Commission.

Third, national enforcement is organised differently in different Member States: it may be more or less centralised and involve various types of actors. For instance, in Poland aid may be granted by banks, ministries and other central institutions, by tax offices, Social Insurance Fund, town halls and municipalities.[9] While actors are numerous, all aid projects receive an opinion of the President of the Competition Authority, whose dedicated department carries out assessment on whether aid should or should not be notified.[10] In contrast, in France there is no centralised overview of national aid, and various local authorities alone are responsible for assessment and granting of aid.[11] It is straightforward to observe that the more numerous the

[8] It will be assumed that absent the GBER, the Commission would assess the measures according to the same procedural and substantive rules as under the notification procedure. This is confirmed by its assessment before block exemptions were adopted or extended.
[9] https://www.biznes.gov.pl/pl/publikacje/3854-co-musisz-wiedziec-jesli-chcesz-uzyskac-pomoc-publiczna .
[10] https://www.uokik.gov.pl/kompetencje_prezesa_uokik_w_zakresie_pomocy_publicznej.php .
[11] https://www.senat.fr/lc/lc248/lc248_mono.html#toc4 .

granting authorities, the more complex the assessment of national enforcement becomes, and it is possible that small local authorities lack expertise in State aid law or a wider perspective on EU law. The discrepancy may be amplified by different bases for granting of aid: national laws that lay down aid schemes probably stand a better chance of scrutiny under the State aid angle than individual aid decisions taken at the regional or local level. However, the effects of such arrangements on the practical enforcement of the GBER are difficult to grasp, especially that this chapter does not aim to carry out a comparative analysis of enforcement systems within the EU. Rather, it takes the perspective of the European Commission, which elaborates the rules that must fit the entirety of national enforcers, so it must rely on some undefined "average skill" of the national authorities.

3. Probability of error in the assessment under the GBER

The GBER provisions, just like any rules, may more or less effectively distinguish between desirable and undesirable practices, while being easier or trickier in application – both these aspects determine the probability of error in assessment. Hence, the trade-off between accuracy at the level of design of the GBER and accuracy at the level of its enforcement needs to be made.

This section will undertake three steps to discuss the probability of error. First, it will analyse the GBER and the case-law of the Court in order to identify the level of complexity of the GBER rule. In fact, the choice of complexity seems to have been explicitly made: the rule should be simple. Second, rightfulness of the simplification will be assessed by discussing the characteristics of the optimal GBER rule: for that purpose, pros and cons of the simple and the complex must be laid out. Third, if the GBER rule is designed to be simple and if that choice effectively lowers the overall probability of error, it will be useful to try to measure the success and identify further challenges by looking at recent studies.

3.1. The GBER criteria – simple or complex?

The level of complexity chosen for the GBER may be identified by looking at two elements. First, the GBER itself, which lays down the criteria for exemption. Second, the case-law of the Court, where the latter directly addressed the question of trade-off between accurate distinction between practices on the one hand, and accurate and uniform application of the GBER on the other.

3.1.1. Assessment criteria as laid down in the GBER

Assessment under the GBER is organised in two parts. First, it comprises an analysis under common provisions, which cover criteria to be fulfilled by all measures, independently of the sector to which they are granted. Second, it covers provisions specific to particular types of aid, grouped in 15 sections.

Common provisions are laid down in Articles 4 to 9 of the GBER. The first one refers to the notification thresholds: they indicate the amount of aid, below which aid may be covered by the GBER, and above which the GBER does not apply so the aid must be notified. The thresholds vary from one type of aid to another. With the second criterion, the Regulation limits its scope to aid defined as transparent, i.e. whose amount may be precisely calculated *ex ante*. The next criterion is that of the formal incentive effect, which consists in verification whether works on the project had not started before the application for aid was submitted, as well as whether the application contained several elements, such as list of project costs or demonstration that aid will have beneficial effects for carrying out of the project. In addition, aid must not exceed the maximum intensity, that is the gross aid amount expressed as a percentage of the eligible costs. In that regard, Article 7 refers to specific provisions which lay down intensity thresholds for different types of aid. The intensity thresholds, together with notification thresholds, shall cover the total amount of aid for the project or undertaking, cumulated with other aid measures, which is necessary to satisfy the cumulation principle. Finally, specific information about the aid must be published by the Member State on a comprehensive State aid website.

In the GBER adopted in 2014, which replaced its predecessor, the Commission removed the previously existing obligation for the State to explicitly refer to the applicable GBER provision in case of individual aid, and to the GBER itself in the text of each aid scheme.[12] This may be considered as a good riddance, inasmuch as it was questionable why such a formal condition should decide on the future of measures which fulfil substantive conditions.[13]

Specific provisions concern, essentially, determination of eligible costs as well as percentages of these costs translating into the applicable intensity thresholds. Moreover, they cover issues

[12] Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty, *OJ L 214, 9.8.2008, p. 3–47, Article 3*.

[13] Michael Berghoger, 'The General Block Exemption Regulation: A Giant on Feet of Clay' (2009) 8 European State Aid Law Quarterly 332.

arising specifically in certain areas, e.g. the regional investment aid shall be maintained in the recipient area for at least five years,[14] access to RDI infrastructures shall be transparent and open,[15] provisions establishing specific conditions for aid for energy efficiency granted via energy efficiency funds or financial intermediaries,[16] and others.

Thus, the criteria laid down in the GBER are totally different from the criteria guiding the Commission's assessment following a notification. Indeed, the only common criteria are those of the incentive effect (and still, only in its formal aspect) and aid intensity. The typical complex criteria, such as distortive effects of aid, necessity and appropriateness, are not part of assessment by national authorities. Moreover, some criteria present equally in both the GBER and Commission's guidelines are simplified in the former, for instance as regards calculation of eligible costs.[17]

3.1.2. Assessment criteria as interpreted by the Court of Justice

While the GBER points at simplification of the assessment criteria as compared to State aid guidelines applicable to the notification procedure, the case-law of the Court explicitly puts simplicity ahead of complexity. Indeed, the exceptional character of the provisions of the GBER, which shall be kept away from ambiguity even at the detriment of the effective distinction between good and bad aid, is defended by the Court.

In 2016, in the *Dilly's Wellnesshotel* case, the Court for the first time made known its views on the interpretation of the conditions of the GBER. That case concerned non-fulfilment by Germany of the formal obligation to refer to the GBER in the text of the aid scheme. The Court underlined that the provisions of the GBER shall be interpreted strictly, because they constitute an exception to the general notification obligation and because they aim to increase transparency and legal certainty. It is only by fulfilling all conditions laid down in that Regulation that these aims may be achieved.[18] Hence, the lack of reference to the Regulation meant that the measure could not benefit from the block exemption regardless of any justification for that procedural failure as well as of fulfilment of the other GBER criteria.

[14] GBER, Article 14(5).
[15] GBER, Article 26(4), 27(3).
[16] GBER, Article 39(5)-(9)
[17] Kristyna Deiberova and Harold Nyssens, 'The New General Block Exemption Regulation (GBER): What Changed' (2009) 8 European State Aid Law Quarterly 38.
[18] C-493/14, *Dilly's Wellnesshotel v Finanzamt Linz* (2016) EU:C:2016:577, paras 37-38.

Although the obligation to make reference to the GBER disappeared from its newest version, the Court's strict interpretation was recently reiterated and even extended to the assessment of the substantive GBER conditions. In the *Eesti Pagar* case,[19] in which the national court interrogated itself about the possibility to examine the existence of an incentive effect beyond the letter of the GBER. In particular, the national judge considered that although the works had started before the submission of the application for aid and thus that condition of the GBER was not fulfilled, other factors indicated that the aid might have produced an incentive effect on the beneficiary. The judge made a reference for a preliminary ruling in order to ask the Court whether it could search for such a 'genuine' incentive effect beyond the strict definition provided in the GBER.

The Court's response was clear-cut – it is not up to national authorities to investigate individual effects of measures, but they ought to follow literally the checklist laid down in the GBER. More specifically, nothing suggests that the Commission intended to transfer to the national level the task of determining whether or not there exists a genuine incentive effect, as the GBER clearly indicates that the incentive effect is determined by reference to the beginning of works on the project.[20] In other words, the exemptions laid down in the GBER cover the measures defined in this act and those measures only.[21] This approach is in stark contrast with the finding of the Court when it reviews Commission decisions, according to which the Commission in its assessment shall look for the incentive effect beyond the simple criterion of the start of works.[22]

Furthermore, the Court provided a more universal interpretation of all GBER criteria. In particular, the concerns of transparency, legal certainty and consistent application require the GBER conditions be "clear and easily enforceable by the national authorities," such as that of incentive effect, which is "simple, pertinent and adequate".[23] This criterion would lose its characteristics if it involved case-by-case complex economic assessments.[24]

It is particularly interesting to contrast the Court's approach with the exactly opposite suggestions of Advocate General in the case. Indeed, the latter considered that "there can be no reasonable doubt" that national authorities have a duty to carry out the detailed analysis of whether the work has started, in line with perception of the start of work as "merely a rebuttable

[19] C-349/17, *Eesti Pagar* (2019) ECLI:EU:C:2019:172
[20] ibid, para 67.
[21] ibid, para 65.
[22] T-126/99, *Graphischer Maschinenbau v Commission* (2002) ECLI:EU:T:2002:116, paras 37-43.
[23] *Eesti Pagar*, paras 61 and 64.
[24] ibid, para 68.

presumption."[25] The Advocate added that "the Member State authority is competent to assess the substance of whether there is an incentive effect. To take the opposite approach would undermine implementation of the General Block Exemption Regulation and the grant of aid under it, because the Member State authority would be unable to verify whether the incentive effect criterion was met."[26] The overarching interests in enforcement of the GBER, such as consistency and clarity, were not identified by the Advocate General, while they completely changed the outcome of the assessment operated by the Court. In addition, rejecting the Advocate's General opinion means that the Court was alerted of the consequences such a strict approach would have, so that the trade-off was made with full awareness.

This position of the Court shows clearly that the assessment carried out by national authorities under the GBER significantly differs from that carried out by the Commission under the notification procedure. Most importantly, it results from the judgment that GBER criteria are designed to be simple criteria. Indeed, they are supposed to be based on black and white, uncontroversial questions, which require a simple piece of information and do not entail any case-specific reasoning. This is also why it has been considered that the simplification of rules proposed by the SAM, understood as a trade-off between simple rules and case-by-case analysis, has been carried out in the GBER but not in the Commission's assessment.[27]

3.1.3. Conclusion

While in the assessment of the notification procedure, it was suggested that the rules were overly complex and would benefit from simplification, the starting point in the case of enforcement of the GBER is the opposite. Indeed, simplicity seems to be the inherent characteristic of the GBER, which stems from the GBER itself and from the case-law of the Court.

Therefore, unlike under notification, the question may arise whether such simplicity is optimal or, instead, the rules could be a little more complex without compromising accuracy. To put it differently, national authorities are currently limited by simple rules while they could, maybe, carry out more complex assessments in order to more accurately separate desirable from undesirable measures. On the other hand, it is difficult to identify the average skill of a national authority, taking into account their dispersion across 27 Member States and within the Member

[25] Opinion of AG Wathelet in *Eesti Pagar* (2018) ECLI:EU:C:2018:768, paras 89-92.
[26] ibid, para 94.
[27] Vincent Verouden, 'EU State Aid Control: The Quest for Effectiveness' (2015) 14 European State Aid Law Quarterly 459, 463.

States themselves. Hence, different assumptions must underlie the two enforcement systems, which motivates the preference for complexity or simplicity. The clear preference for simplicity identified in this section will be discussed as the next step: it will be assessed whether the simple rule is, in fact, the optimal rule for the GBER.

3.2. The optimal assessment rule for assessment by national authorities

The simplification of rules under the GBER as compared to the notification procedure seems to be directly related to the limited mission conferred upon the national authorities as well as to the need for consistent application across the Union. The present section will assess this choice of simplicity and explain why complex rules, unlike in the enforcement by the Commission, are not desirable and would not serve to minimise the risk of error.

3.2.1. Tendency to commit Type 2 errors

The first argument in favour of simple rules resides in the fact that the risk brought by self-assessment by national authorities is mainly that of Type 2 errors. This is for several reasons.

First, application of the GBER is based on mutual trust between the Commission and the Member States.[28] However, in conformity with considerations on informational asymmetries in the procedure before the Commission, a Member State generally prefers to grant aid over not granting it, hence the possibility to self-assess creates a conflict of interests and may tempt a State to cheat.[29] Second, whenever a Member State is approached by an undertaking applying for aid, it may be intentionally or unintentionally led to error, because the undertaking may mislead it in order to obtain aid or may provide it with distorted information. Third, independently of the shortcomings of the procedure before the Commission, the exchange taking place during the notification procedure may allow to 'clean-up' the notification,[30] while the possibility of a dialogue as well as the threat of Commission's further investigation disappear under the GBER. Finally, and specifically due to the increased complexity of post-SAM Commission guidelines, the costs of notification significantly grew, so it is generally cheaper and thus preferable for the Member States to apply the GBER than to notify, even in the case of doubts.[31] Although probably rarely is a State really hesitant about notifying or not a

[28] Berghoger (n 13) 333.
[29] ibid 328; Phedon Nicolaides, 'An Economic Assessment of the Usability of the New General Block Exemption Regulation for State Aid (Regulation 651/2014)' (2014) 10 European Competition Journal 415.
[30] Adinda Sinnaeve, 'Block Exemptions for State Aid: More Scope for State Aid Control by Member States and Competitors' (2001) 38 Common Market Law Review 1487.
[31] Nicolaides (n 29) 406, 409–410.

measure, it is imaginable that it may have doubts concerning e.g. calculation of intensity thresholds or eligible costs, in which case it may decide not to notify because the cost is too high and simply not worth it. This choice is, of course, affected by effectiveness of subsequent monitoring, which will be discussed at a later stage of this chapter.

Therefore, while the Commission had a tendency to commit false negatives because it had limited access to information and it was fed mainly with information favourable to the measure, the Member States tend to approve aid due to informational problems, possible bad faith and costs related to notification. A consequence of this tendency is that errors lead Member States to keep the procedure at the national level and overuse the GBER, instead of giving some measures a right chance of being looked at by the Commission. All in all, both systems favour commitment of Type 2 errors over Type 1 ones. Knowing that aid tends to be mistakenly approved more than to be rejected, the question arises how not to make the national authorities err in the first place.

3.2.2. Advantages of simple rules

Simple rules present a number of straightforward advantages, which are exactly what is needed for assessment by national authorities. Indeed, the use of simple rules should minimise the risk of Type 2 errors by introducing clarity and discipline in assessment as well as facilitating monitoring by the Commission (because it is also more straightforward for the Commission to verify compliance with clear-cut criteria than to engage into complex assessment). Rules leaving little room for interpretation could also allow to avoid the regulatory capture, as well as selfish pursuit of national interests, intrinsically related to decentralised enforcement.[32] In addition, given that national authorities have tendency to approve measures, complex criteria should be avoided because they might work as a black hole, absorbing everything that gets close enough to it, leading to an overuse of the GBER and too many false approvals. Simple rules, on the contrary, by keeping the assessment maximally close to the letter of the GBER, eliminate interpretative issues so as to leave as intact as possible measures falling under the traditional Commission's assessment.

The benefits of simple rules are related to the fact that the probability of error in application of the GBER has two components. First, it depends on the content of the criteria themselves, where an increased use of a simple rule should allow for more straightforward and accurate

[32] Kelyn QC Bacon, *European Union Law of State Aid. Third Edition* (Oxford University Press 2017) 44.

assessment, because there is more certainty and less room for misinterpretation or abuse. Second, it depends on the skill of the national (regional, local) authority. The latter element was not an object of the analysis in the case of the Commission, because the latter is assumed to dispose of experts whose skills are not put into question. However, this is not necessarily the case at the national level and Member States need the Commission's help in order to design compatible measures and lay down efficient procedures to avoid granting of incompatible aid.[33] Indeed, some errors will be inevitable as long as Member States do not ensure a solid framework for rigorous application of the GBER: for instance, they may wrongly calculate the intensity thresholds or identify the eligible costs,[34] even though this assessment would be, on the complexity scale, very simple. Hence, accuracy in assessment by national authorities is not only the question of properly designed rules but constitutes a bigger project than when the enforcer is the Commission.

These two components are related in that simple rules may be enforced with more ease even by less skilled authorities. Simpler rules allow the national authorities to enforce law themselves, but also to detect intentional or unintentional errors which might originate from beneficiaries submitting information. Hence, simple rules are safer in the situation of uncertainty and non-uniformity of skills of various authorities.

3.2.3. Unsuitability of complex rules to assessment under the GBER

While simple rules are preferable for easiness in their application (at the level of enforcement of law), the problem concerning ineffective distinction between desirable and undesirable practices (at the level of design of law) arises. Indeed, the Commission is obliged to reconcile, first, simplicity of the criteria and, second, the positive balance between positive and distortive effects guaranteeing that the measure is compatible.[35]

A) Diversity of interests pursued by the GBER

This dilemma was raised in the above-discussed *Eesti Pagar* case, in which the national judge asked whether different factors indicating that aid produced an actual incentive effect might be taken into account, although the works had started before the submission of the application for aid. The Court implicitly referred itself to accuracy of the assessment carried out on the basis

[33] Nicolaides (n 29) 417.
[34] This was, in fact, one of the problems identified in the 2016 Report of Court of Auditors, which will be discussed in more detail below: Court of Auditors, 'Special Report No 24/2016: More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy' (2016).
[35] Deiberova and Nyssens (n 17) 28.

of straightforward criteria. Namely, application of a simple GBER criterion inherently implies the risk that this criterion does not accurately reflect the true nature of the measure. As the Court framed it, the incentive effect under the GBER is not equivalent to the 'genuine' incentive effect, so that it will sometimes lead to condemning aid which in fact induced its recipient to undertake a project.[36] This is a hands-on example of conflict between accuracy in distinguishing desirable from harmful practices on the one hand, and accuracy in application of law on the other.

Of course, a Type 1 error results only in a notification, where the Commission may correctly find the measure compatible. However, if the national authority could at an earlier stage exempt a measure because it accurately identified the incentive effect of aid, this would ensure a better distribution of resources, by avoiding the costs related to notification as well as the risk of error made by the Commission.

On the other hand, complexity might be undesirable for reasons specific to the GBER. First, enforcement by national authorities needs to factor in many values, which are not as strongly accentuated in the assessment by the Commission, and which may even take priority over the accuracy concern. Indeed, the Court enumerates goals such as efficient supervision of State aid rules, simplification of administration, transparency, legal certainty and consistent application of the GBER throughout the EU.[37] It clearly admits that delegating to national authorities complex economic assessment would undermine those objectives and therefore it prefers to accept the risk of inaccuracy in order to safeguard the values.[38] In addition, a coherent and uniform application of the GBER is of great value, if not vital, as the latter has direct effect and may be invoked before national courts.[39] Indeed, the assessment criteria are applied by plurality of national, regional and local authorities in 27 Member States with different degrees of expertise. Thus, the GBER must simplify the rules to the extent necessary to protect the above-mentioned values while at the same time ensuring accurate identification of desirable measures: the optimal decision rule is therefore a function of accuracy and certain other objectives. One might expect that as Member States gain expertise in State aid law, and provided that they are effectively deterred from intentionally misapplying it, the criteria could be developed into more complex ones.

[36] *Eesti Pagar*, para 67.
[37] ibid, para 61.
[38] ibid, para 68.
[39] Deiberova and Nyssens (n 17) 28; Berghoger (n 13) 327.

Accordingly, allowing diverse circumstances to be taken into account when assessing compatibility of aid would open the door for national authorities to justify measures not strictly fulfilling the GBER criteria. Such freedom would reinforce the risk of Type 2 errors and not that of Type 1 ones, since it is intuitive to expect that additional justification would be searched in cases where a measure does not fulfil the GBER criteria than that a judge would second-guess a fulfilled GBER criterion. Loose interpretation would create the danger of unmanageable occurrence of Type 2 errors in the long-term, accompanied by higher costs of detection and elimination of errors (as the Commission would need to engage in complex assessments in order to contradict the State). Interpretation of the GBER criteria as open-ended ones, and *a fortiori* a direct increase in complexity, could lead to opening of the Pandora's box.

B) Simple measures – simple rules

When investigating the character of the GBER provisions, one may look into the very reason for which certain measures were exempted from notification. As previously mentioned, those are routine measures which, following many years of the Commission's practice, proved to have a clearly positive result of the balancing test,[40] and which involve small budgets and tried and tested policy measures.[41] The GBER also contains a relatively long list of types of measures, to which it may not be applied,[42] as well as the obligation to submit an evaluation plan for aid schemes with a budget above 150 million euros.[43]

Accordingly, complex rules do not correspond to the spirit of the GBER, because the latter is designed to cover only measures that are straightforward and do not require profound assessment in order to be granted an exemption. Indeed, simplicity of exempted measures is precisely the reason for which national authorities are allowed to assess them, and for which the GBER should lead to an increase in efficiency.[44] Hence, the added value of complex rules – that they allow to address complex issues and carry out an effective distinction between ambiguous measures – is of no use under the GBER, because such measures are not supposed to fall under that act. In practice, it means that when analysing the GBER, one shall not look for the optimally complex rule, but one gets a simple rule and must identify measures that may be accurately assessed under it. To put it differently, the responsibility for adequacy of simple criteria lies in the proper pre-selection of measures falling under the GBER – it is the decision

[40] Deiberova and Nyssens (n 17) 28.
[41] Nicolaides (n 29) 405.
[42] GBER, Article 1 (2)-(5).
[43] GBER, Article 1 (2)(a).
[44] Nicolaides (n 29) 404.

rule (simplicity) that determines the scope of the GBER and not the other way around. The ultimate confirmation of simplicity being the prevailing value of the GBER is the reasoning of the Court in *Eesti Pagar*.

This conclusion is opposite to that in the assessment of the notification procedure, where the variety of measures to be assessed requires to find the appropriate rule. Indeed, the luxury the Commission has is that it is free to include under the GBER the measures it considers simple and leave aside all ambiguous and complex matters. However, this means that under the notification procedure, it cannot pick and choose measures it wants to check any more: it must address all of them, and therefore the rule needs to be adapted to the variety and different complexity of all remaining aid. It is reasonable to expect that this exercise is more difficult.

It appears that a simple rule is the optimal choice for the GBER and that it is, in fact, the rule the Commission laid down and the Court interpreted. It is, of course, a very satisfying observation to make. It remains to verify whether this planned simplicity has in fact been achieved, resulting in easy application of the GBER criteria.

3.3. Enforcement of the GBER in practice

Despite the clear willingness to assimilate the rules applied under the GBER to simple rules, it is still disputable to what extent GBER criteria are sufficiently straightforward for them to minimise the risk of error in application. Indeed, it was pointed out in the literature, already under the previous GBER, that its criteria refer to sophisticated economic concepts[45] and ambiguous legal terms requiring further interpretation.[46] Furthermore, their application constitutes a cumbersome task for national, regional and local authorities, for it requires significant resources and adds an additional layer to the already complex EU State aid legal framework.[47] These general reservations signalled in the literature, which were not investigated thoroughly, may be tested by looking at reports and studies, which shed more light on how confident and accurate national authorities really are in applying the GBER.

[45] Ulrich Soltesz and Felix Schatz, 'State Aid for Environmental Protection The Commission's New Guidelines and the New General Block Exemption Regulation' (2009) 6 Journal for European Environmental & Planning Law 170.
[46] Berghoger (n 13) 328.
[47] Soltesz and Schatz (n 45) 168.

3.3.1. The 2016 Report of Court of Auditors

The main problem with concluding on accuracy of national authorities is the lack of a recent study that would be directed precisely at enforcement of the GBER. More specifically, studies on the GBER are relatively old (before the newest GBER was in force) while more recent studies are not on the GBER but on national enforcement in general. Still, their analysis allows to outline some picture of application of the GBER and, which is particularly important, to identify promising trends.

The first evaluations of the enforcement of the GBER were relatively unoptimistic. Indeed, in 2012, the Commission's monitoring exercise revealed that around 40% of cases of application of block exemptions were 'potentially problematic', although it was not specified what that conclusion concretely means nor in what the "compliance gaps" consisted of.[48] In 2016, the Court of Auditors released a report, in which it assessed for the 2007-2013 period the level of non-compliance with State aid rules in cohesion policy and the extent to which the Commission was aware of the causes of non-compliance.[49] Hence, the scope of the report was relatively limited, but in the absence of any other relevant study, it may constitute a valuable indication of the error-rate and the subsequent steps taken by the Commission.

By means of a review of audit reports of the Commission and national authorities, analysis of Commission regulations and national procedures, and interviews with Commission and national representatives, the report aimed to identify the error rate as well as the Commission's capacity to detect infringements. It was considered that the error rate in State aid assessment in implementation of cohesion policy at the national level was of 20,9%, and especially high in application of the GBER (12,3%).[50] The errors occurred in particular in the area of calculation of intensity thresholds and identification of the incentive effect.[51] Importantly, national audit authorities identified the error rate only at 3.6%,[52] which demonstrates a lack of expertise of national authorities in identifying problems in enforcement of State aid law. Furthermore, a

[48] Joaquín Almunia, 2012,The State Aid Modernisation Initiative, Speech at the Experts' Forum on New Developments in European State Aid Law, available at http://europa.eu/rapid/press-release_SPEECH-12-424_en.htm .
[49] Court of Auditors, 'Special Report No 24/2016: More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy' (n 34).
[50] ibid, in particular paras 25-26, 56 and 60-66.
[51] ibid, para 28.
[52] ibid, para 74.

huge part of national audit authorities considered State aid rules to be complex, for reasons such as the volume of legislation and difficulty in application.[53]

3.3.2. Enforcement of the GBER after 2016

However, since the release of the report in 2016, the GBER itself has changed. Moreover, the Commission responded to the report and took action in order to provide conditions for a more accurate enforcement. Accordingly, it has made, and continues to make, efforts to both streamline the rules and educate the authorities involved in the assessment, which was a clear response to the report in the ESFI area, but which concerns State aid enforcement in general.

Indeed, the situation seems to have slightly improved under the new 2014 GBER, in which certain notions were reviewed in order to avoid ambiguity, although the literature considered it to have become 'clearer, but not by much.'[54] The GBER was also accompanied by a practical guide covering frequently asked questions,[55] what certainly brings further clarity and uniformity in application.

Moreover, the Commission understood that national authorities need to gain administrative capacity, including adequate resources and know-how,[56] and devoted itself to contribute to achievement of that capacity the quickest and smoothest possible. Following the tough report of the Court of Auditors, the Commission undertook a number of actions allowing to more accurately apply State aid law at the national level and more efficiently control this application in the area of Structural and Investment Funds (ESIF) and beyond. Amongst others, the Commission introduced the so-called "ex-ante conditionalities", which include arrangements for the effective application of EU State aid rules in the area of ESIF, training and dissemination of information for staff, and strengthening of the administrative capacity in the Member States.[57] In addition, many seminars, studies, meetings and exchanges were organised in order to disseminate knowledge and work out better solutions, involving ESIF practitioners, auditors, experts, DG REGIO and EMPL officers and even senior management of DG COMP and REGIO.[58] The commitment has been made to continue these efforts at least until 2022.

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[53] ibid, paras 80-83.
[54] Nicolaides (n 29) 413–414.
[55] European Commission, 2015 and 2016, General Block Exemption Regulation (GBER) Frequently Asked Questions, http://ec.europa.eu/competition/state_aid/legislation/practical_guide_gber_en.pdf .
[56] Common State aid action plan 2018-2022, *Strengthening Member States' Administrative Capacity for the Management of the ESIF in the Field of State Aid* (SAAP for ESIF), 2.
[57] ibid, 4.
[58] ibid, 4-10.

Supported by the Commission, some Member States themselves work towards a better enforcement, for instance by introducing *ex ante* or *ex post* screening mechanisms and other 'best practices,' designed to embed a 'culture' of enforcement of State aid rules among the national stakeholders.[59] Several Member States have also self-assessed they were not fulfilling the ex-ante conditionalities and committed to a plan allowing to remedy this situation.[60] Moreover, national bodies may ask the Commission or the Court of Justice a clarification whenever they encounter difficulties in understanding a provision of the GBER or a term from the Notice of the notion of aid. They may also obtain direct support in designing and implementing State aid schemes in the ESIF area from a pool of thematic experts.[61] This shall allow to lower down the risk of error in application, as different instances may be involved in application of problematic notions to individual cases. Consequently, cooperation between the Commission and Member States for the purpose of resolving ambiguities may incentivize States to comply with State aid law.[62]

As a result of these changes, the Commission considered that the State aid error rate in ESIF projects decreased at great speed, to only 6% of the overall error rate in 2015 (without specifying the previous error-rate) and noted no quantification of errors regarding State aid rules in 2016 and 2017, which it took as a sign that error stopped being a prominent issue.[63] In addition, the Court of Auditors observed increasing improvement in audit authorities' checks on state aid, reinforced by the Commission's engagement in verification of the methodology used.[64] Nevertheless, data is missing for almost all sectors since, as the Court of Auditors admits, projects under Structural Funds are less prone to infringements of State aid rules because they often fall under the de minimis rule.[65] Furthermore, the Commission limits itself to broad statements not supported by any particular studies or reports, so that it would be premature to conclude that error rate is significantly going down.

[59] *European Commission,* 2019, Study on the enforcement of State aid rules and decisions by national courts, available at https://ec.europa.eu/competition/publications/reports/kd0219428enn.pdf, 9.
[60] SAAP for ESIF, 4.
[61] ibid, 8.
[62] Phedon Nicolaides, 'State Aid Modernization: Institutions for Enforcement of State Aid Rules' (2012) 35 World Competition 457–463.
[63] SAAP for ESIF, 3 and 4.
[64] Court of Auditors, 'Annual Report on the Implementation of the Budget Concerning the Financial Year 2015' (2016) 6.58.
[65] Court of Auditors (n 63).

3.3.3. Conclusion

Accuracy in the assessment carried out by the national authorities constitutes a long-term effort, which brings two conclusions as to the probability of decisional errors. First, the Commission certainly understood the direction to follow and the very preliminary evaluations of the Court of Auditors seem to confirm that the error-rate is decreasing. Second, the probability of error in enforcement of the GBER, unlike in the case of the administrative procedure before the Commission, relies on fragmented and only partially controllable factors, in particular expertise, trustworthiness and professionalism of national, regional and local agents. Therefore, further simplification is not necessarily the solution: education and training seem to be the key values, and this is where most efforts are currently placed.

3.4.Conclusion

This section demonstrated that the criteria laid down in the GBER are designed to be relatively simple, and in any case, much simpler than the criteria applied under the notification procedure. This choice is made clear by the Court of Justice, which had a chance to open the door for a more case-by-case analysis, but rejected that possibility. The author agrees with that choice because simple rules are not only more efficient in the assessment under the GBER but are intrinsically related to the idea of decentralisation. Indeed, it is only because national authorities can carry out simple assessments, and because some measures may be qualified as compatible without deep investigation, that such decentralisation is supposed to bring efficiency gains.

The recent efforts made by the Commission in the area of ESIF, motivated by the unfavourable 2016 Court of Auditor's Report, focused essentially on education and on an open approach in order to help national authorities understand State aid law. The Court of Auditor's annual studies suggest that these policies yield a decrease in the error rate, although these conclusions are imprecise and it is difficult to trace back the development of the analysis. There is also no recent study on accuracy in the application of the GBER as such. One may expect that education and simplicity form the right universal approach which must, in the long-term, lead to higher accuracy, and in any case, there does not seem to exist any other reliable and quick method to tackle the plurality of different national agents who design and evaluate the measures in light of the GBER.

4. Costs of errors made by national authorities

The second component of the equation, after the probability, is the cost of error. If that cost was lower under the enforcement of the GBER, then the GBER could bring efficiency gains even if the probability of error was the same or even higher than under the notification procedure. Similarly to the analysis of the enforcement by the Commission, three different types of costs may be analysed: costs of error impacting the market, procedural costs and distortion of incentives. In order to avoid repetition, this section will focus on costs only when they differ from costs described in Chapter 3 of this thesis. The point of this exercise is to enable the comparison of costs of error under the notification procedure on the one hand, and under the GBER on the other hand. More specifically, if the latter is lower than the former, then decentralisation could be beneficial even if the probability of error under both systems was the same.

4.1. Effects of error on the market and procedural costs

The costs an error has on the market, namely the distortions of competition it may cause, should generally be the same independently of whether enforcement is based on the GBER or on the notification procedure. Indeed, this cost of error is based on the objective characteristics of the measure, whose erroneous grant (or lack of grant) may provoke negative consequences on the market and the question of who errs is not relevant for that end. In other words, had the same measure been erroneously admitted by the Commission, this cost would not be higher than when granted under the GBER.

The second type of costs are procedural costs. Naturally, procedural costs as such are different at the level of the Commission and at the national level, because different authorities and procedures are involved – this is the obvious characteristic of the GBER. However, both for national authorities and the Commission it seems that Type 2 errors entail lower procedural costs than Type 1 ones. For the Commission a Type 1 error is related to higher costs of a formal investigation procedure as compared to a Type 2 error following, most often, a preliminary examination. For the enforcement under the GBER, Type 1 errors entail costs related to unnecessary notification of measures complying with the GBER. The analysis shows that preparing a notification is more expensive than assessment on the basis of the GBER, and this difference in costs is even more significant under the current GBER than under the previous

one.[66] Hence, approvals being simply a shorter way to a definitive decision, Type 2 errors are related to lower procedural costs. As regards the cost of Type 1 error under the Commission's and national enforcement, one would need to compare the costs of opening an unnecessary formal investigation procedure by the Commission and those of submitting an unnecessary notification by a Member State.[67]

4.2. Effects of errors on States' incentives

The final, but more complex, cost is the one related to distortion of Member States' behaviours and incentives. In the notification procedure, the objective was to create and strengthen incentives for the Member States to design and notify measures considered to be the most beneficial for the European Union (for instance, the horizontal objectives enshrined in the Lisbon Treaty). For that purpose, the Commission may consistently be inclined to approve some measures more than others, so that Member States are incited to grant aid to such areas, because there is a higher probability they will be approved. States' incentives may be manipulated by the Commission thanks to the separation of the actor who designs the measure according to its incentives (the State) from the actor who assesses it (the Commission).

Unlike in the notification procedure, in which Member States may design different types of compatible aid, out of which some are more desirable than others, decentralisation means that the States may only choose between designing GBER measures or not. Therefore, the reasoning is different because the incentive to grant measures to certain sectors is already created by the very fact of adopting the GBER. First, it is straightforward to consider that creating the safe harbour of the GBER has as the objective (openly admitted by the Commission) to favour granting of the GBER measures over unexempted ones. Second, it seems there is no point further differentiating between more and less desirable GBER measures, because all of them are treated equally as exempted from notification on very similar conditions. Consequently, there is no further room to develop a strategy to channel exempted States' expenses to some areas more than others.

In these circumstances, an erroneous application of the GBER by a State does not have the same consequences as when the Commission errs. In particular, if a Member State acts in good faith, it is not aware of the error and thus, the latter will have no bearing on the State's incentives. In

[66] Nicolaides (n 29) 406, 409–410.
[67] Naturally, the cost of notification would be different for each Member State, depending on the national procedure, as well as for each measure, depending on its complexity.

contrast, if a State acts in bad faith, this means its incentive has already been distorted (it consciously misapplied the GBER), and this situation resembles a case for deterrence. Indeed, the State may not correct its own incentives[68] when it, at the same time, both designs and assesses the measure. Therefore, such intended error must be deterred through an error correction mechanism, such as monitoring or judicial review, which will be discussed further in this chapter. In other words, for an error to potentially undermine incentives to comply, it needs to remain undetected, and thus it is not the error that distorts incentives but a deficient error correction mechanism.

Finally, the cost eventually arising from an undetected error is probably limited when compared to the Commission's error. More specifically, the Commission's centralised decision-making is more visible to the entirety of Member States and may more easily reach this public. Consequently, a false approval in an individual case may be noticed by a Member State and therefore States may build their incentives to grant different types of measures on the Commission's decisional practice. Nevertheless, decentralised enforcement means that Member States are not necessarily aware of measures correctly or erroneously granted by other Member States as well as of potential procedures following an incorrect application of the GBER. Therefore, they tend to develop incentives to comply or not essentially on the basis of their own experience. As a result, an undetected error would entail costs with regard mainly to the Member State concerned and would not extend to other States' incentives. Hence, the impact on incentives is probably more differentiated between States when they enforce State aid law themselves than when this law is enforced centrally by the Commission. In other words, more errors need to be committed to generate the same effects as fewer errors committed centrally by the Commission.

Consequently, the costs of an error might be slightly different, possibly lower, when State aid law is enforced through the GBER. This observation regards in particular the impact on Member States' behaviour, strictly related to error correction, whereby an undetected error has consequences limited mainly to the Member State at the origin the error.

[68] Unless one takes into account distortion of incentives of different national, regional and local authorities. However, for simplicity, in this chapter a State is considered as a whole, without investigating into the internal structure of enforcement.

4.3.The changing cost of error

The discussion on costs of errors made by national authorities under the GBER encounters the same problem as that observed in the enforcement by the Commission. Namely, its result is distorted by the cost of error increasing with the number of errors, higher for more frequently committed Type 2 errors than for rarer Type 1 ones. As it was explained in Chapter 3, the cost of each next error may be higher than the cost of the previous one, by which the initial preference for a cheaper cost of error may fade away with the time. For instance, if a national authority erroneously calculates the aid intensity and exempts a measure under the GBER, and this error goes undetected once, this does not yet incite the State to regularly over-include aid under the GBER – a single Type 2 error is not capable of permanently changing a State's behaviour. However, if such undercalculation of aid intensity repeats itself and *ex post* mechanisms consistently do not capture the error, the State is incited to maintain its method of calculation and risks to reproduce the error more frequently. This finding holds both when the State is unaware of the mistake (in which case it will simply believe its assessment is correct) and when the State underestimates the aid intensity on purpose (in which case it will be incentivised to underrepresent the values to grant more measures without notification). To put it differently, the overall cost of several errors may exceed the simple sum of their individual costs. The practical implication is that the more numerous the errors, the more difficult to identify their cost and establish the preference for one type of error becomes.

As mentioned in the section above, the point in which the cost of error finds itself in a given moment is different for each Member State, as costs related to distortion of incentives and procedural costs generally extend only to the Member State concerned. A further question is that of the reach of error costs even at the national level, whenever national, regional and local authorities are involved: the more dispersed the granting authorities, the weaker the effect of an individual error. Indeed, the more national authorities are involved, the more complex the issue of incentives becomes. Nevertheless, as already mentioned in Chapter 3, this thesis does not undertake the project of analysing the structure of enforcement in individual Member States. Suffice it to say that errors made under the GBER have weaker effect on incentives that those made by the Commission within the framework of the notification procedure.

4.4.Conclusion

The costs of a decisional error made by national authorities might, possibly, be lower than the costs of the same error made by the Commission. This is due to two elements, which refer to the fact that enforcement under the GBER becomes more of a private, national matter than when the Commission is involved. First, the incentives of the States change from designing particular notifiable measures into designing whatever GBER measure, so that there is no much role for error to steer those incentives. The focus should rather go to preventing the States from granting aid under the GBER wherever a measure should be notified. Second, the cost of error, which grows with the time, is split into at least 27 costs, limited to the territory of the Member State concerned. Consequently, more errors made at the national level are needed to distort the costs of errors to the same extent as when the Commission errs.

5. Error correction mechanisms

As previously discussed, a well-functioning error correction mechanism allows one to decrease the costs of errors already committed, as well as influence the probability of future errors. In the enforcement by national authorities under the GBER, it is particularly important for two reasons. First, the plurality of agents and the fragmented character of enforcement make the latter by definition more challenging to control so that error correction is indispensable to introduce discipline, uniformity and improve the functioning of the GBER in the future. Second, as regard Member States' incentives to comply with the GBER, it is only an effective error correction that may address infringements made in bad faith, while identification of errors committed in good faith contributes to the project of education of national authorities.

Error correction may be divided into two categories: control exercised by the Commission within the framework of *ex post* control mechanisms laid down in the GBER on the one hand, and control taking place in national courts, with the predominant role of competitors (and even beneficiaries) on the other. Both of them present shortcomings, which may not be eliminated by immediate and straightforward solutions.

5.1.Monitoring by the Commission

The Commission, whose role is 'limited' to overseeing the enforcement of the GBER, must assume a new responsibility which determines the effectiveness of the entire system. Indeed, error correction mechanisms are officially and principally entrusted upon the Commission, and they consist mainly in monitoring of State aid enforcement. The efforts relating to monitoring

are particularly justified in light of the 2011 Report of the Court of Auditors, revealing frequent errors in enforcement at the national level, and pushing the Commission to admit that an increased *ex post* control of GBER measures must be part of State Aid Modernisation package.[69]

5.1.1. Rules for monitoring

Within the framework of their reporting obligations, the Member States need to inform the Commission about each measure exempted on the basis of the GBER within 20 days from its entry into force.[70] Moreover, they must submit to the Commission annual reports on all existing aid schemes,[71] hence also those not notified on the basis of the GBER. Finally, Member States must keep all necessary documents during 10 years in order to enable the Commission to carry out its monitoring duties.[72]

The GBER and the Procedural Regulation are silent on the purpose of monitoring. However, the Code of Best Practices explains that the Commission, on an annual basis, selects a sample of State aid schemes for further scrutiny.[73] This scrutiny covers verification of compliance with the legal basis as well as implementation of the scheme.[74] In case of discovering non-compliance with the GBER, the sanction is designed to be harsh. Indeed, if a Member State avoided notification of a measure under the cover of the GBER, the Commission may withdraw the benefit of the GBER for future measures, all or some of them.[75] This means that measures fulfilling the GBER criteria would in any case have to be notified and assessed by the Commission. Although available already since the 2008 GBER, this sanction has, however, not yet been imposed.

Monitoring fulfils a number of other missions, which extend from spotting irregularities in application of the GBER and reporting these (the most straightforward objectives), to values such as increased awareness of State aid rules, their improvement in the future, and deterrence from non-compliance.[76] For instance, in the period from 2009 to 2014 monitoring led to 8

[69] SAM, para 21.
[70] GBER, Article 11(a).
[71] The Procedural Regulation, Article 26(1); GBER, Article 11(b).
[72] GBER, Article 12(1).
[73] European Commission, Code of Best Practices for the conduct of State aid control procedures (2018/C 253/05), recital 83.
[74] ibid, recital 84.
[75] GBER, Article 10.
[76] María Muñoz De Juan, 'Monitoring of State Aid. From Ex Ante to Ex Post Control' (2018) 17 European State Aid Law Quarterly 488.

voluntary recoveries and 8 formal actions.[77] Moreover, monitoring may allow the Commission to identify ambiguous and vague rules which cause troubles in application and address this problem by changing rules in the future,[78] so that the probability of error in application falls.

5.1.2. Conclusion drawn from past monitoring

As established in the 2016 report of the Court of Auditors, DG COMP considered, based on its monitoring activity, that around 36% of all aid schemes were affected by problems in the 2009-2014 period.[79] These problems consisted in weaknesses in the design of aid schemes or in the implementation of individual aid, which affected the compatibility assessment in 7,3% of all cases and as much as 12,3% of GBER schemes. In practice, these percentages represent cases, in which the Commission could proceed to recovery of illegal aid.[80] The 36% rate of problematic aid schemes was considered to have fallen to 20% in 2014 and further to 5,8% in 2015,[81] which outlines a positive trend in understanding and correct application of State aid rules at the national level.

However, in 2011, the Court of Auditors observed that the quality of data provided by Member States within the framework of monitoring was relatively low, as States provided incomplete spreadsheets and encountered troubles in calculating the amount of aid.[82] A part of the problem was considered to be the lack of coordination between public authorities at different levels.[83] It is indeed crucial for an effective monitoring that Member States follow the principles of close and sincere cooperation,[84] both in their relationship with the Commission and between its own authorities. However, the 2011 report pointed that efficiency and reliability of data-gathering process was an issue and should thus be improved.[85]

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[77] Court of Auditors, 'Special Report No 24/2016: More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy' (n 34) 117.
[78] De Juan (n 76) 490–491.
[79] Court of Auditors, 'Special Report No 24/2016: More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy' (n 34) 54.
[80] ibid.
[81] De Juan (n 76) 492–493. The source cited a presentation of Gert Jan Koopman before the European Parliament of 25 June 2018, which is not available online any more.
[82] Court of Auditors, 'Special Report No 15/2011 – Do the Commission's Procedures Ensure Effective Management of State Aid Control?' (2011) 38–39.
[83] ibid 38.
[84] De Juan (n 76) 484, 486.
[85] Court of Auditors, 'Special Report No 15/2011 – Do the Commission's Procedures Ensure Effective Management of State Aid Control?' (n 82) 43.

Due to the lack of a more up-to-date study, it is difficult to consider whether *ex post* control has improved, especially in the context of the GBER. In any case, the problem remains that monitoring is an incomplete exercise and its selective nature makes it a delayed and unreliable means of error correction in individual cases. On the other hand, if the Commission verifies publications of measures on a more regular basis, it will create a 'back door notification,'[86] which contradicts the idea of decentralisation. Consequently, error correction has to be further entrusted upon a different procedure and different actors, and the latter seem to be those directly affected by the grant of aid.

5.2. The role of competitors and beneficiaries in error correction

Since the Commission is absent at the stage of assessment, and the extended exemptions led to shift from the *ex ante* to *ex post* check,[87] it may be said that the GBER entails an evolution of the role of actors involved in the State aid procedure.[88] This is naturally the case for Member States, which enforce State aid law, and the Commission, which monitors but does not assess. However, the evolution extends to actors such as competitors, who now appear on the frontline of the fight for the identification and communication of errors to responsible authorities, as well as to beneficiaries of aid.

Error correction lies mainly in the hands of competitors. Indeed, Commission's monitoring is carried out on a selective basis and it is better suited for general overview of enforcement of the GBER by Member States than for spotting errors in individual, targeted measures. As a result, it is essentially the competitors' role to monitor grants of aid by Member States and to signal doubts to the Commission or national courts in order to, as observed already in 2005, increase the discipline in the field of State aid.[89] Their participation is also necessary for the national courts to gain expertise in assessment originating from actions brought on the basis of the GBER.[90]

One question is that of how competitors may carry out this control. In that regard, the increased transparency achieved through obligation to publish State aid was designed partly to allow

[86] Berghoger (n 13) 334.
[87] Verouden (n 27) 464.
[88] Sinnaeve (n 30) 1487.
[89] SAAP, para 55.
[90] As suggested by Sinnaeve (n 30) 1495.

competitors to check legality of State measures.[91] Indeed, it is mandatory for Member States to publish summarised information about all exempted aid measures as well as detailed information for individual aid above 500 000 euros.[92] Especially the latter requirement is considered to allow to detect cheating by Member States and to make individual aid as visible to competitors as aid schemes.[93] Information on state aid individual award data provided by all Member States is also available on a Commission's website:[94] therefore, it is accessible for competitors similarly to Commission decisions published following the administrative procedure.

Nevertheless, the way in which competitors' control is exercised is different than in the case of Commission decisions. Since the main risk brought by the notification procedure is that of Type 2 errors following the preliminary examination, competitors benefit from the (relatively) simplified action for annulment, by which they need to draw the Court's attention to the existence of serious doubts or difficulties in the assessment. Competitors do not need to propose to the Court any alternative substantive analysis. On the other hand, when they make reference to the GBER, they may only question the fulfilment of GBER criteria and thus, they need to get involved into the core State aid assessment. This requires more expertise and resources and may thus be less attractive and accessible to competitors, as well as constitute an inefficient solution if competitors are not familiar enough with State aid law. As a consequence, spotting Type 2 errors committed by Member States may prove less reliable than spotting Type 2 errors in Commission Phase 1 decisions on the basis of the protection of procedural rights.

A role in preventing occurrence of error may also be played by aid beneficiaries, who have similar interests to the State in the notification procedure, but not necessarily when an aid is granted under the GBER. Namely, in the notification procedure, the interest of a beneficiary is to obtain an approval of aid by the Commission, which constitutes a definitive decision and eliminates the risk of both prohibition of aid and its recovery. However, under the GBER the beneficiary risks much more, with the threat of recovery: an erroneous exemption, if detected, amounts to the finding of illegal aid. This threat is particularly real, as the Court recently indicated that it is the beneficiary's responsibility to establish that aid is granted lawfully, which

[91] Competition Policy Brief, 2014(4), State aid transparency for taxpayers, http://ec.europa.eu/competition/publications/cpb/2014/004_en.pdf, 1.
[92] GBER, Article 9, Annexes II and III.
[93] Nicolaides (n 29) 414, 416.
[94] https://webgate.acceptance.ec.europa.eu/competition/transparency/public?lang=en .

obliges it to verify if the GBER criteria were interpreted correctly and to refuse aid in case of doubts.[95]

In this context, the problem remains the involvement of the beneficiary in the national procedure, or in other words, the ways in which a beneficiary may fulfil his function both in his own interest and in the interest of a lower expected cost of error. Indeed, the fact that the GBER reserves no role for beneficiaries in the national procedure ultimately forces the latter to be passive and reduces its incentives to check the accuracy of assessment.[96] This procedural lacuna additionally highlights the importance of the existence of a national forum, on which errors may be *ex post* brought up and discussed.

Sceptical competitors or beneficiaries may either notify their doubts to the Commission in form of a complaint or turn to national courts. The first option, certainly counter-intuitive for the beneficiaries, sends us back to the assessment by the Commission. Therefore, the rest of this section will discuss the enforcement of the GBER by national judges.

5.3.Enforcement of the GBER in national courts

The role of national courts significantly increased under the GBER, because previously compatibility assessment was entirely excluded from their competence. Although that general rule has not changed, the courts are now led to evaluate whether the compatibility conditions laid down in the GBER are fulfilled in order to decide whether a measure was exempted from the notification obligation.

In case of interpretation doubts, a national judge disposes of a range of tools allowing it to overcome uncertainty. First, a judge may make a traditional reference for a preliminary ruling in order to remove ambiguity. Second, he may ask the Commission for its opinion on questions concerning application of State aid rules, in particular of the GBER. Third, one shall not forget the Commission's guidance documents the national courts may rely on when carrying out a State aid analysis.[97] Moreover, the Commission may intervene before national courts as *amicus*

[95] As interpreted from *Eesti Pagar*. See StateAidHub, National Authorities Must Recover Aid they Grant Mistakenly, 2019, Question 3, available at http://stateaidhub.eu/blogs/stateaiduncovered/post/9468; Slaughter and May, Competition & Regulatory Newsletter 2019 Issue 6, available at http://www.slaughterandmay.com/media/2537394/competition-and-regulatory-newsletter-6-mar-19-mar-2019.pdf, 4-5.

[96] Sinnaeve (n 30) 1493.

[97] E.g. Commission notice on the enforcement of State aid law by national courts, General Block Exemption Regulation Frequently Asked Questions.

curiae.[98] Especially the latter tool was considered as promising because it allows the Commission to contribute to the application of State aid rules which used to fall under its exclusive competence: it should therefore recur to it more frequently than in competition cases.[99] However, since 2009, the Commission submitted at least 20 observations in such *amicus curiae* mode, and responded to at least 21 requests for opinion from national courts, which is not considered to be a significant use of these tools.[100]

In 2019, the Study on the enforcement of State aid rules and decisions by national courts in the period 2007-2017/2018 was released. However, its limited usability for the present chapter resides in the fact that first, it analyses enforcement at the level of courts, and not administrative authorities and second, it does not single out enforcement of the GBER. Instead, it covers such aspects as enforcement of the standstill obligation, recovery of aid, identification of the best practices, or cooperation tools between national courts and the Commission.[101] Therefore, this study may be used mainly to observe the general trends in awareness and successful application of State aid rules, with the assumption that these observations the most probably extend also to the GBER.

The report demonstrates that in most Member States, State aid enforcement in national courts becomes more efficient: the number of both public and private enforcement cases have increased. Interestingly, the number of private enforcement cases tripled from 2007 to 2017 and is also triple the number of public ones, amounting to a little less than 600.[102] These statistics are promising also for the GBER, because they show that private litigants get more interest in State aid law and that the courts have more opportunities to create their expertise, both of which are pre-requisites for an effective error correction. The problems that remain relate to limited knowledge and understanding of State aid law both by claimants and national judges, and complexity of State aid assessment involving at the same time different areas of law: accordingly, the national courts face difficulties in verifying the fulfilment of State aid conditions, also under the GBER.[103] In addition, an up-to-date question is still that of the basic rules governing national procedures, in particular with regard to access to the court, the burden

[98] The Procedural Regulation, 29(1), Notice on Cooperation with national courts, recitals 18 and 91(b).
[99] Vittorio Di Bucci, 'The Modernisation of State Aid Control and Its Objectives: Clarity, Relevance, Effectiveness' (2014) 2014 Italian Antitrust Review 14–15.
[100] Spark and others, 'Study on the Enforcement of State Aid Rules and Decisions by National Courts' (2019) 10–11.
[101] ibid 21.
[102] ibid 63, 91.
[103] ibid 7–8, 92.

of proof and access to the file. Indeed, it has been suggested already with regard to the 2008 GBER that some harmonisation of procedures could be considered.[104] These shortcomings prevent the private applicants from effectively carrying out their function of guardians of national enforcement, whether it relates to recovery or to granting exemptions.

As regards efforts which may be initiated centrally by the Commission, those are the same as in the case of national authorities applying the GBER: education and training. The Commission is devoting much attention to this activity, and improvement is observable, although still many recommendations may be made, mainly in order to raise awareness.[105]

5.4.Conclusion

The assessment of error correction mechanisms in the application of the GBER is not obvious. First, monitoring by the Commission is an incomplete exercise and does not suffice to address the issue of individual errors. Second, competitors and beneficiaries would have to dispose of a certain degree of knowledge and understanding of the GBER criteria while national judges do not seem to be fully comfortable with enforcement of EU State aid law either. On the other hand, all reports and studies suggest significant improvements: it is observed that the Member States start to develop some 'State aid enforcement culture' and get to understand the value of changes to national procedures in the effective enforcement.[106]

Therefore, while evolution is undeniable and laudable, it may still not be concluded that the error correction is in full swing at the moment. It seems that a long road is ahead to become optimistic about the quality of the GBER assessment at national courts and, probably more importantly, to gain confidence in the active and good quality participation of third parties in enforcement of the GBER. Ultimately, the problem of error correction resembles that of the action for annulment before the General Court: competitors need to assume their role in State aid enforcement and should be educated and trained just like public authorities are. In addition, the appropriate forum to review their objections should be guaranteed, as one is far from acknowledging that reliability of assessment by national judges is anywhere near the reliability of the limited assessment made by the General Court.

[104] Berghoger (n 13) 335.
[105] Spark and others (n 100) 8–10.
[106] ibid 9–10.

6. Comparison of enforcement by national authorities and by the Commission

The above conclusions on the enforcement of the GBER may be contrasted with problems identified in this thesis pertaining to enforcement of State aid law by the Commission. They will be analysed in light of the three components of an error-analysis: error probability, cost and correction.

6.1. Probability of error

Regarding the probability of error, in Chapter 2 it was concluded that the Commission's assessment currently does not rely on the optimally complex assessment rule. It is because it applies one and the same, relatively complex, rule at both procedural stages, especially in the preliminary examination where the risk of a Type 2 error is particularly high.

The tendency to commit Type 2 errors is the case also under the enforcement of the GBER;[107] however, the question of the complexity of the rule is very different. Indeed, the optimal complexity is pre-determined on the basis of the values pursued by the GBER, because even if some authorities were able to carry out more complex assessments, the objectives of uniformity and necessity to accommodate to various authorities with varying degrees of expertise, require the rules to be relatively simple. Unlike in the assessment by the Commission, optimal complexity has been the object of reflection, but the choice went for simplicity, whose value is underlined both in the literature and in the Court's case-law. Hence, the challenge for the Commission is to make sure that the measures covered by the simple GBER rule are in fact sufficiently straightforward and clearly beneficial. Because simple rules are easy in application, the expertise required from national authorities is relatively limited, especially when the opportunity is given to send a reference for the preliminary ruling to the Court in the case of doubts. Education and training are key to achieve accuracy and, importantly, sufficient guarantees must be provided that intentional errors will be detected and condemned.

It is easy to note that the suggestion for the Commission was to simplify the rules, while for the GBER it is to ensure correct enforcement of simple rules and maybe, once a certain level of expertise achieved, to complexify them in the future. The complexity scale in State aid

[107] This is at the level of enforcement by national authorities, unlike at the level of design of the GBER, where under-inclusion seems to be preferred. This may be observed in the *Eesti Pagar* case, where the Court preferred to force the national authority to notify instead of identifying the "genuine" incentive effect.

enforcement is therefore the following: the simplest is the GBER rule, more complex is the rule for the preliminary examination and the most complex is that for the formal investigation.

It is interesting to observe that there are two values that need to be reconciled: ability to enforce the rules and the optimal complexity of the rule. For the national authorities, the rule is in place, but it is necessary to catch up in terms of expertise. In contrast, the Commission's ability to enforce the rules is fixed by the procedural design, but the rule needs to be found to match that ability. While all efforts are put into raising the level for expertise of national authorities, no plans are in place to improve enforcement by the Commission.

Indeed, the essential difference is that the optimal level of complexity was reflected on by the Commission and by the Court for the GBER, but not for the notification procedure; at least, no traces of such an analysis are to be found. Indeed, this thesis argued that one needs to make a trade-off between accurate distinction between measures on the one hand, and accurate application of substantive rules on the other. Such trade-off still needs to be done at the level of the procedure before the Commission, where rules must certainly be more complex, but out of differently complex rules, one still needs to decide which one to choose. In that regard, the GBER gives good example.

6.2.Costs of error

Under both types of enforcement, it is impossible to determine the preference for one type of error, due to the expected tendency to commit Type 2 errors and the growing cost of error. Still, the cost of an error might possibly be lower under the assessment by national authorities. This is because the costs are limited to the territory of the State concerned, which slows down the pace of growth of the cost of error.

In addition, negative effects of an error on incentives may not be established, as a State may not distort its own motivation. Indeed, no hierarchy between different GBER measures may be observed, as opposed to the Commission's policy to encourage granting of good aid to some sectors more than to others. Hence, as long as a State designs a GBER-compatible aid, there is no case for inducement effect like the one under the notification procedure. Moreover, if the States may be seduced to act in bad faith in order to grant under the GBER a notifiable aid, the responsibility for deterring them from such behaviour falls on error correction mechanisms.

The difficulty in assessing the cost of error appears at a different level of analysis, but prevents the conclusion on preference for one type of error under both regimes. More specifically, for the Commission, the problem was that the disproportion between Type 1 and Type 2 errors is that significant that no one can know any more how much the next error of each kind could possibly cost. Therefore, it is essential to first address the high probability of error in the preliminary examination or, in other words, to identify and apply the optimal assessment rule. In contrast, under national enforcement, it is difficult to indicate the costs themselves, because of variety of national enforcers, lack of true incentive effect, and procedural costs depending on national laws. This finding means that for both systems, the task of decreasing the expected cost of error must rely on lowering the probability of error on the one hand, and improving error correction mechanisms on the other.

6.3.Error correction mechanisms

It was concluded that the most reliable way to contest Commission's State aid decisions is to bring an action for annulment before the General Court. It was further considered that the case-law of the Court seems to evolve in favour of competing undertakings, in particular as regards elimination of the criterion of individual concern in line with *Montessori* judgment and increased vigilance of the Court on the point of existence of serious difficulties in Phase 1.

In enforcement by national authorities, actions before the national courts play an essential role. However, the studies suggest that litigation is still limited while the expertise of national courts is not apparent. Curiously, both types of enforcement share the same challenge and the same recommendation, namely it is necessary to sensitize private actors, in particular competitors, to State aid litigation and increase awareness of both State aid rules and of the role private actors should play in controlling effective enforcement, whether by the Commission or national authorities.

Monitoring constitutes an additional chance for the Commission to spot errors, although the control is by definition selective and incomplete. Hence, without private actors triggering control by means of a complaint to the Commission or an action before a national court, effective error correction will not be achieved. In addition, monitoring is certainly less effective than *ex post* evaluation of notified measures, by which the Commission may directly oblige the State, in a positive decision, to assess the effects of the measure after the prescribed period.

Therefore, investment in State aid education of private litigants so that they recognise problematic aid measures, and increasing their incentives to trigger judicial proceedings whenever they spot problems, lies in the interest of effective State aid enforcement independently of the identity of the enforcer.

6.4.Conclusion

The GBER requires much more elements to combine to obtain the desired result than the notification procedure. Indeed, while the latter relies essentially on the Commission and only in accessory manner on other actors, decentralization involves various actors at different levels of enforcement, starting from the structure of Member States' administrations. Moreover, many instruments need to be coordinated: monitoring, cooperation, training, so that they all need to be seen in a broader context of application of the GBER as entailing 'joint responsibility'.[108] Consequently, it is more difficult to evaluate the functioning of the GBER and to make suggestions on how to improve it than to analyse the Commission as one, well-defined enforcing authority. Still, one important challenge is shared by both systems: the need for aware private actors that could be guardians of sound enforcement.

Recommendations rely mainly on values such as learning, increased awareness and working out the ways for effective enforcement, both on the national authorities' and the Commission's side. In other words, the success of the GBER may be measured principally in terms of efforts put into this success. Taking into account the simplicity of the GBER criteria, it is reasonable to expect that once a certain level of expertise is reached, the accuracy will be higher than in the enforcement by the Commission, as the rules are relatively straightforward. Therefore, when national authorities understand them, they will be able to correctly enforce the GBER in most cases, while the room for acting in bad faith will be limited.

This optimistic vision contrasts with the absence of search for the optimally complex rule under the notification procedure: while the enforcement of the GBER is constantly improving, no improvement process was triggered by defining the exact scope of the preliminary Commission's assessment. Certainly, the notification procedure could benefit from an accuracy-oriented analysis similar to the one that accompanied the laying down and interpretation of the GBER.

[108] De Juan (n 76) 491–492.

7. Conclusion

This chapter analysed the expected cost of error in application of the GBER and reached the following conclusions. First, as regards the probability of error, the effort is made to keep the rules as simple as possible, which is in line with the aim of the GBER, i.e. exemption of straightforward measures not requiring case-by-case analysis. In addition, the scarce available studies as well as observation of Commission's efforts provide reasons to expect that national authorities do become increasingly familiar with the GBER and apply it with growing confidence and accuracy. Second, the cost of error might possibly be lower under the assessment by national authorities than at the outcome of a notification procedure, mainly because the impact of error committed at a lower level is weaker. Third, error correction mechanisms are difficult to grasp as monitoring presents inherent shortcomings while actions in national courts are subject to procedural autonomy and limited competence of national judges. Again, progress is observable, but there is no ground to assume that challenging application of the GBER would be as efficient as contesting a Commission's State aid decision before the General Court. In particular, there exist no recent studies which would assess application of the GBER, overall or in individual Member States.

The objective of increasing compliance may prove difficult to achieve because apart from the effort at the EU level, in terms of designing appropriate rules and creating attractive cooperation tools, Member States need to take the initiative themselves. In particular, the enforcement will be lacking as long as Member States do not genuinely wish to improve the design of beneficial measures, do not cooperate with the Commission and do not ensure that State aid rules are consistently applied by national authorities at different levels (national, regional and local).[109]

In that context, all studies seem to suggest a significant improvement in the application of the GBER and State aid rules more generally, both by the national authorities and courts. In addition, the more the years pass, the more the authorities seem to become familiar with State aid law, so it is reasonable to expect the accuracy to be increasing with time. This should, hopefully, apply also to the very important issue of active participation of competitors in the error correction process. Decentralisation, accompanied by efforts put into education and

[109] Speech of Joaquín Almunia, 2012, *The State Aid Modernisation Initiative*, at the 10th Experts' Forum on New Developments in European State Aid Law, available at http://europa.eu/rapid/press-release_SPEECH-12-424_en.htm .

training, shall have positive consequences on awareness of third parties, which should benefit State aid enforcement in general, whether by the Commission or the national authorities.

To conclude, and referring back to the three scenarios, under which the expected cost of error of the GBER enforcement is higher, lower or the same as compared to enforcement by the Commission, one may of course not indicate in which set-up we currently find ourselves. However, the evolution and positive trends observable across most areas of enforcement at the national level allow to consider that the expected cost of error will continue to fall, allowing for the efficiency gains from the GBER to grow and confirming the advantages of decentralisation.

Conclusion

This thesis discussed the issue of accuracy in State aid decisions, by analysing the components of the expected cost of error, probability and the cost, and providing suggestions on how to decrease them. Its development and main findings may be summarised as follows.

In the first place, the thesis discussed certain aspects of EU State aid law, which are relevant for an error-analysis. It has been considered that Type 1 errors in State aid enforcement consist in erroneous prohibitions of desirable aid, while Type 2 errors cover cases of erroneous approvals of harmful aid measures. State aid procedure is composed of two procedural stages, which differ in terms of their objective and design. On the one hand, the preliminary examination shall provide an initial view on the measure and aims to identify straightforward desirable measures. On the other hand, the formal investigation procedure constitutes an in-depth assessment of measures, as to the compatibility of which persist doubts after Phase 1. The analysis further demonstrated that evidence requirements in State aid assessment are relatively low. Finally, the chapter discussed in detail the main arrangement of State aid procedure: predominant role played by the Member State concerned, which is the main or even the unique partner of the Commission in the procedure. Reliance on the State has been discussed in terms of informational asymmetries, which the Commission needs to overcome in order to assess each measure. Accordingly, dialogue with the State may be detrimental to the quality of assessment inasmuch as the State may withhold or distort the information that is not in its interest, or simply do not possess it, as better information may be held by market operators.

Building on those finding, the thesis moved on to the components of the expected cost of error, starting with its probability. It carried out an analysis of procedural and substantive provisions and concluded that the Commission may be inclined to commit Type 2 errors in the preliminary examination. This risk arises from the fact that it cooperates only with the Member State, which argues in favour of the measure, while the Commission disposes of almost no own investigation tools. This risk is certainly lower in the formal investigation, which lasts much longer, and which potentially includes other actors in the procedure. Subsequently, the analysis demonstrated that each of the two procedural stages, due to their function and resources available, has different optimal assessment rule, i.e. the rule that allows the law to distinguish between desirable and undesirable practices the best it can while ensuring correct application of the rule in individual cases. Consequently, the assessment rule shall be more complex in the formal investigation and simpler in the preliminary examination. It was further observed that

there is no evidence that the duality of the rule was taken into account in State aid law, as the Commission seems to apply the same set of rules at both procedural stages. Since using the complex rule in Phase 1 corresponds precisely to the risk of error described in the chapter, the suggestion is for the Commission to reflect on the scope of assessment and on the content of the assessment rule applied in the preliminary examination. If the optimal assessment rule is identified and followed, it would allow to lower the probability of error and therefore, its expected cost.

As regards the cost of error, the analysis aimed to, similarly to well-developed literature in antitrust, indicate the error that entails lower costs. Such analysis could suggest a preference for one type of error, whose commitment would lower down the expected cost of error. Three main costs were identified: distortions of the market caused by erroneously admitted/prohibited aid, distortion of Member States' incentives and procedural costs. When analysing these costs, in particular the impact of errors on the States' motivations to grant aid, it was observed that false approvals may even have positive consequences as they may reinforce the Commission's strategy to favour the granting of specific types of horizontal aid. However, State aid enforcement faces an important obstacle to any potential preference. Indeed, given that the decision-making is concentrated mainly in Phase 1, while the risk of Phase 1 Type 2 errors seems higher than the risk of Type 1 ones, the issue of potentially growing cost of error arises. The practical implication is that the more numerous the errors, the more difficult to identify their cost and establish the preference for one type of error becomes. This trouble only emphasises the importance of identifying and applying the appropriate assessment rule, in order to lower the probability of error and, importantly, avoid one procedural stage presenting much higher risk of error than the other one.

Both the probability and the cost of error may be tackled through an efficient error correction mechanism, by which errors could be spotted and eliminated. Amongst different potential tools, the action for annulment presents the biggest potential to effectively address the issue. On the one hand, the traditional action against the merits of the decision is the most comprehensive review mechanism, and access to it may be importantly facilitated thanks to elimination of the criterion of individual concern in the *Montessori* judgment. On the other hand, the limited scope of review and the doubtful expertise of judges on the matter may be considered as drawbacks, although the use of experts and reliance on the statement of reasons may constitute solutions. However, in the context of the problem identified in the thesis, the action based on the protection of procedural rights may be even better-suited to eliminate errors. Indeed, the

possibility to attack the Commission's procedural choice not to open a formal investigation, which proved to be more successful in the recent months, avoids many problems of the action on the merits and addresses the issue of erroneous finding of no doubts at the end of Phase 1. Notwithstanding this potential, the problem remains that of active participation of competitors in judicial review. Indeed, competitors currently do not bring actions for annulment, and the judicial review is that rare that this issue may undermine its effectiveness as an error correction mechanism. Effort should be put into education of competitors about State aid law so that they bring better substantiated and more frequent applications.

Finally, the analysis of errors in Commission's State aid decision-making has been completed by a look into the General Block Exemption Regulation, by which the Commission delegated a significant part of enforcement towards national authorities. Indeed, if national authorities apply law more accurately than the Commission, for instance because the assessment rule is better suited for the exempted measures than the complex rule laid down in guidelines, decentralisation may lower the expected cost of error in State aid enforcement overall. The analysis shows that unlike in the notification procedure, the aim of the GBER is to adopt the simplest rules possible, in order to ensure accurate and coherent enforcement. Moreover, the cost of an error made at a national level may be lower, not only because measures targeted by the GBER by definition are less harmful, but also because information about error may not spread easily amongst Member States. Finally, error correction mechanisms are the weak link of the national enforcement, inasmuch as the ways of redress are fully governed at a national level and competitors face the same problem of low awareness and passivity as in the notification procedure. At the same time, the selective character of monitoring and its limited scope imply that it may not be considered as a comprehensive error correction mechanism. In order to ensure as accurate application of the GBER as possible, so that the expected cost of error in State aid enforcement is brought down, the effort in education, training and assistance in application of the GBER are crucial. Although it is difficult to measure the result, the Commission undoubtedly invested itself to provide these pre-requisites, and it is logical to expect the expected cost of error to fall with time, at least at the level of enforcement in good faith. In parallel, the GBER constitutes another argument in favour of education of private actors so that they may fulfil their role as guardians of sound State aid decisions.

Contribution to the literature

By its findings, as well as the methodology adopted, this thesis contributed to the existing literature in two ways. First, it drew attention to error as an overlooked aspect of State aid law, while showing that error-analysis is crucial for achievement of goals of State aid and broader EU policies. Moreover, it constitutes a precious legitimising factor for Commission's actions. Since analysis of the expected cost of error is important, this thesis added accuracy to the catalogue of values, which all add up to the European project, together with fundamental rights, economically viable outcomes, transparency, coherence or active and aware democratic society. These objectives shall be pursued and weighed against each other in the search for the most effective and efficient State aid enforcement. For instance, more economic approach and complexification of rules may not be praised without considering the practical ability to enforce them, while more open access to justice may bring limited benefits without competent review by the Court and private parties' interest in bringing actions. Hence, this thesis assessed State aid design and its reforms from an entirely new and enriching perspective. The gap that existed in the literature as regards error has been filled, for a more complete understanding and better-informed future analysis of State aid law.

Second, the choice of this methodology allowed to provide several observations on State aid law, which were not previously made. Indeed, the analysis led to concrete conclusions, such as the lack of distinction between the assessment rule for the preliminary examination and that for the formal investigation, low evidence requirements in State aid assessment, or the character of informational asymmetries challenging the Commission. It showed to the reader that the preliminary examination the most probably leads to under-performance of the Commission and should therefore be better structured and clearer. Although no final conclusions could be drawn as to preference for one type of error, the thesis engaged with the parallel analysis of preference in antitrust which has not been previously carried out, and it underlined how the possibly changing cost of error may alter any preference, even beyond State aid law. Within the framework of the action on annulment, it took on board the recent developments in case-law, which change the assessment of the effectiveness of the judicial review, and it emphasised the essential need for enhanced competitors' participation in order for error correction to work. Finally, it assessed that the GBER has great potential to become an accurate tool for State aid enforcement, as long as educational efforts and *ex pos*t control are broad in scope and consistent. More globally, this thesis considered that error may in fact vitiate State aid decisions, justified that claim, and offered solutions to decrease the expected cost of error.

Policy recommendations

Beyond the academic aspect, this thesis offerred certain policy recommendations, which may potentially be implemented, or at least analysed, by the Commission and the Court of Justice. First, it calls for clarification of the scope of assessment in the preliminary examination in order to bring the probability of error down. The Commission might uniformize its assessment by issuing an act of soft law or best practices, in which it could specify the material difference between the assessments at both procedural stages and reflect on the optimally complex while manageable assessment rule. This way, it would systematise the assessment for itself as well as communicate its scope to the public in the interest of transparency and legal certainty, in addition to increased accuracy. Alternatively, the Court of Justice could impose on the Commission stricter requirements concerning the nature of assessment, by defining its desired scope in its evaluation of actions based on the potection of procedural rights.

Second, and still considering suggestions to the Court, accuracy concerns certainly confirm the widely spread opinion that the admissibility conditions for actions against the merits are excessive and shall be lower. In this context, much hope is placed in the future assessment of actions brought with reference to the *Montessori* judgment, as well as in the stronger inclination to investigate, and potentially annul, decisions against Phase 1 decisions. The Court could also be more willing to use experts in actions on the merits. Although the problem of competitors' awareness remains, facilitating access to justice and increasing their expected benefit from actions is the first and necessary step in educating private parties' and encouraging them to effectively safeguard legality of decisions.

Finally, it is suggested that the Commission, aside from its programmes of training for national administrative and judicial authorities, puts effort to educate also private parties, in particular when they act as competitors of aid beneficiaries. Indeed, since the entire error correction system in State aid control, both at the EU and at the national level, relies on those private actors, they need to play an active role in State aid enforcement. The large extent to which the Commission engaged itself to educate national authorities suggests that it would be feasible to elaborate on programmes for competitors, or to invite Member States to further transfer down the acquired knowledge.

Thus, the Commission could increase the quality of its own decision-making by more carefully and consistently assessing measures in Phase 1. For national authorities, the educational effort needs to be long-term and constant, so that national agents gain enough expertise and confidence to apply the GBER with a safe level of accuracy. These long-term efforts pertain

even more to competitors. Indeed, only when the latter become ready and willing to assume more responsibility for State aid enforcement, more weigh might be put on error correction mechanisms as a reliable tool. Because such result could be achieved only in a longer run, it seems that currently, the most real way to tackle the expected cost of error is to prevent occurrence of error by lowering down its probability.

Suggestions for further research

This thesis embarked on the project of an error analysis in State aid enforcement. However, due to the fact that no similar analysis previously existed in the State aid literature, it was necessary to narrow down the scope of analysis and ignore certain interesting issues. These issues might form the object of future research.

First, this thesis focused solely on the procedure following notification. Therefore, it would be interesting to extend the analysis and test its conclusions in the context of unnotified aid. Although this thesis mentioned illegal aid when it appeared particularly pertinent (for instance, when rejecting deterrence as a valid concern in State aid law), the somewhat *ex post* character of control, as well as the presence of complainants, could possibly alter certain outcomes of the analysis. Error could be analysed also at the stage of recovery orders. In the same vein, conditions joint to positive decisions might be an interesting object of a study, since an erroneous condition might in fact amount to an erroneous approval of undesirable aid.

Second, it would be interesting to develop analysis with regard to enforcement of the GBER by national authorities. Indeed, the problem of the GBER is that its effectiveness relies on elements which are difficult to assess from the upper, centralised perspective. In other words, one would need to investigate legal systems of different Member States, the procedure applied in assessment of the GBER, the structure of enforcement, as well as the role of national courts in spotting errors. Although a study has recently been made on enforcement of State aid law by national authorities, it does not focus on the GBER and refers to decentralisation as such in a limited manner. Consequently, there certainly is some room for research into State aid decision-making in different Member States, which could shed more light on how the GBER is enforced at the national level.

Finally, this thesis was written by a lawyer and therefore, it carried out error-analysis without adopting economic tools. Although it is the author's belief that its conclusions are viable without economic demonstration, certain observations could certainly be developed within the

framework of economic analysis. These issues include, for instance, moral hazard of Member States misapplying State aid law, trade-off between accuracy of the substantive rule and accuracy in its application, as well as questions related to costs, such as the influence of error on Member States' incentives or the changing cost of error undermining any preference. Lastly, using error as the angle of analysis could motivate more economic research into the action for annulment, where variables determining desirable outcomes are numerous and could be further reflected on.

Bibliography

Books

Arnull A, *The European Union and Its Court of Justice. Second Edition* (Oxford University Press 2007)

Bacon K, *European Community Law of State Aid* (Oxford University Press 2009)

Bacon KQ, *European Union Law of State Aid. Third Edition* (Oxford University Press 2017)

Basedow J and Wurmnest W, *Structure and Effects in EU Competition Law. Studies on Exclusionary Conduct and State Aid* (Wolters Kluwer 2011)

Bilal S and Nicolaides P, *Understanding State Aid Policy in the European Community : Perspectives on Rules and Practice* (European Institute of Public Administration 1999)

Biondi A, Eeckhout P and Flynn J, *The Law of State Aid in the European Union* (Oxford University Press 2004)

Bourgeois JHJ, *Ten Years of Effects-Based Approach in EU Competition Law : State of Play and Perspectives* (Bruylant 2012)

Chalmers D and Arnull A, *The Oxford Handbook of European Union Law* (Oxford University Press 2015)

Chalmers D, Davies G and Monti G, *European Union Law. Text and Materials. Third Edition* (Cambridge University Press 2014)

Cotterrell R, *The Politics of Jurisprudence: A Critical Introduction to Legal Philosophy* (Lexis Nexis 2003)

Craig P, *EU Administrative Law. Second Edition* (Oxford University Press 2012)

Curtin D, *Executive Power of the European Union* (Oxford University Press 2009)

De Cecco F, *State Aid and the European Economic Constitution* (Hart Publishing 2013)

De Vries S, Bernitz U and Weatherill S (eds), *The Protection of Fundamental Rights in the EU After Lisbon* (Hart Publishing 2013)

Ehlermann C-D, *European Competition Law Annual 2009: The Evaluation of Evidence and Its Judicial Review in Competition Cases* (Hart Publishing 2010)

Friederiszick HW, Roller L-H and Verouden V, 'European State Aid Control: An Economic Framework', *Handbook of Antitrust Economics* (MIT Press 2007)

Galetta D-U, *Procedural Autonomy of EU Member States : Paradise Lost ? A Study on the « Functional Procedural Competence » of EU Member States* (Springer 2011)

Geradin D, *EU Competition Law and Economics* (Oxford University Press 2012)

Gerber DJ, *Law and Competition in Twentieth Century Europe : Protecting Prometheus* (Oxford University Press 1998)

Giannakopoulos TK, *Safeguarding Companies' Rights in Competition and Anti-Dumping/Anti-Subsidies Proceedings. Second Edition* (Kluwer Law International 2011)

Guzman AT, 'A Compliance-Based Theory of International Law', *Economics of public international law* (Edward Elgar 2002)

Hancher L, Ottervanger T and Slot PJ, *EU State Aids* (Sweet & Maxwell 2016)

Harlow C and Rawlings R, *Law and Administration* (Cambridge University Press 2009)

Hawkins K, *The Uses of Discretion* (1992)

Heidenhain MH, *European State Aid Law* (CH Beck; Hart 2010)

Kaplow L, *Economic Analysis of Law* (National Bureau of Economic Research 1999)

Karpenschif M, *Droit Européen Des Aides d'État* (Bruylant 2015)

Le Galès P, 'Est Maître Des Lieux Celui Qui Les Organise: How Rules Change When National and European Policy Domains Collide', *The institutionalization of Europe* (Oxford University Press 2001)

Lenaerts K, Maselis I and Gutman K, *EU Procedural Law* (Oxford University Press 2014)

Lever SJ, 'Some Procedural Conundrums in State Aids Law', *The law of State aid in the European Union* (Oxford University Press 2004)

Mariatte F, Ritleng D and Denys S, *Contentieux de l'Union Européenne : Annulation. Exception d'illégalité* (Lamy 2011)

Markovits R, *Economics and the Interpretation and Application of U.S. and E.U. Antitrust Law* (Springer 2012)

Marquis M and Cisotta R (eds), *Litigation and Arbitration in Eu Competition Law* (Edward Elgar 2015)

Mateus AbelM and Moreira T (eds), *Competition Law and Economics : Advances in Competition Policy Enforcement in the EU and North America* (Edward Elgar 2010)

Mathis K, *Efficiency Instead of Justice? : Searching for the Philosophical Foundations of the Economic Analysis of Law* (Springer 2009)

Merola M and Debieuvre M, 'The New Approach to State Aid: Contributions and Limits Form Case Law of the European Courts', *Competition law and economics : advances in competition policy enforcement in the EU and North America* (2010)

Merola M and Derenne J (eds), *The Role of the Court of Justice of the European Union in Competition Law Cases* (Bruylant 2012)

O Keeffe D (ed), *Judicial Review in European Union Law: : Essays in Honour of Lord Slynn*

(Springer 2000)

Ortiz Blanco L (ed), *EU Competition Procedure* (3rd edn, Oxford University Press 2013)

Perrot A, 'Do National Champions Have Anything to Do with Economics?', *Competition law and economics : advances in competition policy enforcement in the EU and North America* (Edward Elgar 2010)

Pesaresi N and others (eds), *EU Competition Law*, vol 4: State Aid (Claeys & Casteels 2016)

Piernas López JJ, *The Concept of State Aid under EU Law : From Internal Market to Competition and Beyond* (Oxford University Press 2015)

Polinsky AM and Shavell S (eds), *Handbook of Law and Economics* (Elsevier 2007)

Posner EA (ed), *Economics of Public International Law* (Edward Elgar 2010)

Posner RA, *Economic Analysis of Law* (Wolters Kluwer Law&Business 2007)

Quigley C, *European State Aid Law and Policy* (3rd edn, Hart Publishing 2015)

Rideau J (ed), *Le Droit Au Juge Dans l'Union Européenne* (LGDJ 1998)

Rosas A, Levits E and Bot Y (eds), *The Court of Justice and the Construction of Europe : Analyses and Perspectives on Sixty Years of Case-Law* (TMC Asser Press 2013)

Rose V and Bailey D (eds), *European Union Law of Competition* (Oxford University Press 2013)

Rose-Ackerman S (ed), *Economics of Administrative Law* (Edward Elgar 2007)

Sabbadini P-M, *Les Aides d'Etat. Aspects Juridiques et Économiques* (Larcier 2015)

Scharpf FW, 'Negative and Positive Integration', *Governing in Europe: Effective and Democratic?* (Oxford University Press 1999)

Schwartz WF, 'Legal Error', *Encyclopedia of Law and Economics*, vols 1. The History and Methodology of Law and Economics (2000)

Shavell S, *Foundations of Economic Analysis of Law* (Belknap Press of Harvard University Press 2004)

Slot PJ, 'EC Policy on State Aid Are the Procedures "User-Friendly"? The Rights of Third Parties', *Understanding State aid policy in the European Community : perspectives on rules and practice* (European Institute of Public Administration 1999)

Spector D, 'State Aids: Economic Analysis and Practice in the European Union', *Competition policy in the EU : fifty years on from the Treaty of Rome* (Oxford University Press 2009)

Tosato GL and Bellodi L (eds), *EU Competition Law*, vol 1: Procedure (2nd edn, Claeys & Casteels 2015)

Türk AH, *Judicial Review in EU Law* (Cheltenham, UK ; Northampton, MA : Edward Elgar

2009)

Van Miert K, ‘Reflections of Seven Years as Commissioner Responsible for State Aid’, *European Competition Law Annual 1999: Selected Issues in the Field of State Aid* (2001)

Von Bogdandy A and Bast J (eds), *Principles of European Constitutional Law. Second Reviewed Edition* (Hart Publishing 2009)

Ward A, *Judicial Review and the Right of Private Parties in EU Law* (2nd edn, Oxford University Press 2007)

Wathelet M, *Contentieux Européen* (2nd edn, Larcier 2014)

Journal Articles

Abaquesne de Parfouru A, ‘Locus Standi of Private Applicants under the Article 230 EC Action for Annulment: Any Lessons to Be Learnt from France’ (2007) 14 Maastricht Journal of European and Comparative Law

Ahlborn C and Piccinin D, ‘The Application of the Principles of Restructuring Aid to Banks during the Financial Crisis’ (2010) 2010 European State Aid Law Quarterly

Allen PJ, ‘The New Standard for Admissibility in European Community State Aids Actions after Cofaz’ (1987) 10 Fordham International Law Journal 578

Allensworth RH, ‘The Commensurability Myth in Antitrust’ (2016) 69 Vanderbilt Law Review 1

Aman ACJ, ‘Globalization, Democracy, and the Need for a New Administrative Law’ (2002) 49 UCLA Law Review 1687

Anderson M and Huffman M, ‘Iqbal, Twombly, and the Expected Cost of False Positive Error’ (2010) 20 Cornell Journal of Law and Public Policy 1

Arthur TC, ‘A Workable Rule of Reason: A Less Ambitious Antitrust Role for the Federal Courts’ (2010) 68 Antitrust Law Journal 337

Baker JB, ‘Taking the Error out of the “Error Cost” Analysis: What’s Wrong with Antitrust’s Right’ (2015) 80 Antitrust Law Journal 1

Bar NM and Safra Z, ‘On the Desirability of Appellate Courts’ (2006) 2 Review of Law and Economics 381

Bartosch A, ‘The Procedural Regulation in State Aid Matters. A Case for Profound Reform’ (2007) 6 State Aid Law Quarterly 474

Baye MR and Wright JD, ‘Is Antitrust Too Complicated for Generalist Judges? The Impact of Economic Complexity & Judicial Training on Appeals’ (2010) 09–07 George Mason University Law and Economics Research Paper Series

Beckner III CF and Salop SC, ‘Decision Theory and Antitrust Rules’ (1991) 67 Antitrust Law Journal 41

Berghoger M, ‘The General Block Exemption Regulation: A Giant on Feet of Clay’ (2009) 8 European State Aid Law Quarterly

Besley T and Seabright P, ‘The Effects and Policy Implications of State Aids to Industry: An Economic Analysis’ (1999) 14 Economic Policy 14

Bilal S and Nicolaides P, ‘An Appraisal of the State Aid Rules of the European Community: Do They Promote Efficiency?’ (1999) 33 Journal of World Trade 97

Blauberger M, ‘From Negative to Positive Integration? European State Aid Control Through Soft and Hard Law’ (2008)

——, ‘Of “Good” and “Bad” Subsidies: European State Aid Control through Soft and Hard Law’ (2009) 32 West European Politics 719

Bork RH, ‘The Rule of Reason and the Per Se Concept: Price Fixing and Market Division’ (1965) 74 Yale Law Journal 775

Botta M, ‘State Aid Control in South-East Europe: The Endless Transition’ (2013) 12 European State Aid Law Quarterly

Boutin X and Peduzzi R, ‘Searching for “Good Aid”: The Role of Evaluation’ (2015) 14 European State Aid Law Quarterly 250

Buendía Sierra JL, ‘The Role of Competitors in State Aid Procedures’ (2015) 14 European State Aid Law Quarterly

‘Challenging State Aids the Effect of Recent Developments’ (1986) 23 Common Market Law Review 867

Christiansen A and Kerber W, ‘Competition Policy with Optimally Differentiated Rules Instead of “Per Se Rules vs Rule of Reason”’ (2006) 2 Journal of Competition Law & Economics 215

Creve BA, ‘Locus Standi Requirements for Annulment Actions by Competitors: The Resurfacing “Unique Position Test” Ought to Be Discarded’ (2014) 13 European State Aid Law Quarterly 233

Dalton HL, ‘Taking the Right to Appeal (More or Less) Seriously’ (1985) 95 Yale Law Journal

De Juan MM, ‘Monitoring of State Aid. From Ex Ante to Ex Post Control’ (2018) 17 European State Aid Law Quarterly

Deiberova K and Nyssens H, ‘The New General Block Exemption Regulation (GBER): What Changed’ (2009) 8 European State Aid Law Quarterly

Demougin D and Fluet C, ‘Deterrence Versus Judicial Error: A Comparative View of Standards of Proof’ (2005) 161 Journal of Institutional and Theoretical Economics 193

Derenne J and Kaczmarek C, ‘La Récupération Des Aides Illégales : Le Rôle Du Juge National Dans Le « private Enforcement » Du Droit Des Aides d’Etat’ (2009) 10 ERA Forum

251

Devlin A and Jacobs M, 'Antitrust Error' (2010) 52 William & Mary Law Review 75

Dewatripont M, 'The Economics of State Aid Control: Some Remarks' (2006) 2 Competition Policy International 93

Di Bucci V, 'The Modernisation of State Aid Control and Its Objectives: Clarity, Relevance, Effectiveness' (2014) 2014 Italian Antitrust Review

Easterbrook FH, 'Limits of Antitrust' (1984) 63 Texas Law Review 1

Ehrlich I and Posner RA, 'An Economic Analysis of Legal Rulemaking' (1974) 3 The Journal of Legal Studies 257

Evans DS and Padilla AJ, 'Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach' (2005) 72 University of Chicago Law Review

——, 'Excessive Prices: Using Economics to Define Administrable Legal Rules' (2005) 1 Journal of Competition Law and Economics 97

Farantouris N, 'Firms in Difficulty and State Aids: A Compatibility Analysis' (2009) 30 European Competition Law Review 494

——, 'Port Infrastructure and State Aids: In Search of a Coherent EU Policy' (2012) 11 European State Aid Law Quarterly 85

Fiedziuk N, 'Towards Decentralization of State Aid Control: The Case of Services of General Economic Interest' (2013) 36 World Competition 387

Filpo F, 'The Commission 2009 Procedural Reform from a Private Party Perspective: Two Steps Forward, One Step Back?' (2010) 10 European State Aid Law Quarterly 8

Garoupa N, 'The Theory of Optimal Law Enforcement' (1997) 11 Journal of Economic Surveys 267

Geradin D and Petit N, 'The Development of Agencies at EU and National Levels: Conceptual Analysis and Proposals for Reform' (2004)

Goyder J and Dons M, 'Damages Claims Based on State Aid Law Infringements' (2017) 16 European State Aid Law Quarterly

Gyselen L, 'La Transparence En Matière d'aides d'etat: Les Droits Des Tiers' (1993) 29 Cahiers de droit européen 417

Hancher L, 'Towards an Economic Analysis of State Aids' [2005] European State Aid Law Quarterly 425

Heimler A and Jenny F, 'The Limitations of European Union Control of State Aid' (2012) 28 Oxford Review of Economic Policy 347

Hovenkamp H, 'Post-Chicago Antitrust: A Review and Critique' [2001] Columbia Business Law Review 257

Hüschelrath K and Peyer S, ‘Public and Private Enforcement of Competition Law - A Differentiated Approach’ (2013)

Jackson JR, ‘On Decision Theory under Competition’ (1968) 15 Management Science

Jaeger T, ‘The Inquisition Retakes Brussels (Via the New Procedural Regulation)’ (2013) 12 European State Aid Law Quarterly 441

Kaplow L, ‘The Value of Accuracy in Adjudication – an Economic Analysis’ (1994) 23 The Journal of Legal Studies 307

——, ‘A Model of the Optimal Complexity of Legal Rules’ (1995) 11 Journal of Law, Economics, & Organization 150

Katsoulacos Y and Ulph D, ‘On Optimal Legal Standards for Competition Policy’ (2009) 57 The Journal of Industrial Economics 410

——, ‘Optimal Enforcement Structures for Competition Policy: Implications of Judicial Reviews and of Internal Error Correction Mechanisms’ (2011) 7 European Competition Journal 71

——, ‘Decision Errors, Legal Uncertainty and Welfare: A General Treatment’ [2014] School of Economics & Finance Discussion Paper, no. 1408 1

——, ‘Legal Uncertainty, Competition Law Enforcement Procedures and Optimal Penalties’ (2016) 41 European Journal of Law and Economics 255

——, ‘Regulatory Decision Errors, Legal Uncertainty and Welfare: A General Treatment’ (2017) 53 International Journal of Industrial Organization 326

Kube V, ‘Analysis of the Dossier de Procédure Original: Plaumann v. Commission Case 25/62’ (2019)

Lacchi C, ‘Multilevel Judicial Protection in the EU and Preliminary References’ (2016) 53 Common Market Law Review 679

Lang JT, ‘EU State Aid Rules - The Need for Substantive Reform’ [2014] European State Aid Law Quarterly 440

Laprévote F-C, ‘A Missed Opportunity? State Aid Modernization and Effective Third Parties Rights in State Aid Proceedings’ [2014] European State Aid Law Quarterly 426

Lichtman D and Lemley MA, ‘Rethinking Patent Law’s Presumption of Validity’ (2007) 60 Stanford Law Review 45

Lowe P, ‘Current Issues of E.U. Competition Law: The New Competition Enforcement Regime’ (2004) 24 Northwestern Journal of International Law & Business

Maican O-H, ‘The Legal Regime of State Aids. A Historical Evolution’ (2014) 3 Perspectives of Business Law Journal 130

Maillo J, ‘Balancing Environmental Protection, Competitiveness and Competition: A Critical

Assessment of the GBER and EEAG' (2017) 16 European State Aid Law Quarterly

Makarov A, 'Anti-Competitive Agreements in Russian Courts (2008–2012): Antitrust Law Implementation and Interpretation' (2019) 31 Post-Communist Economies

Mavroidis PC, 'Remedies in the WTO Legal System: Between a Rock and a Hard Place' (2000) 11 European Journal of International Law 763

Metselaar A, 'Who Can Invoke State Aid Law before National Judges? That Floating Question of Legal Interest in the Case Law of Dutch Courts' (2014) 13 European State Aid Law Quarterly 250

Mihai B, 'State Aids and Economic Competitiveness from the EU Perspective' <http://steconomice.uoradea.ro/anale/volume/2008/v1-international-business-and-european-integration/120.pdf> accessed 19 January 2018

Nebbia P, 'Do the Rules on State Aids Have a Life of Their Own. National Procedural Autonomy' (2002) 33 European Law Review 427

Nehl HP, '2013 Reform of EU State Aid Procedures: How to Exacerbate the Imbalance between Efficiency and Individual Protection' (2014) 13 European State Aid Law Quarterly 235

Neven DJ, 'Competition Economics and Antitrust in Europe' [2006] Economic Policy 741

Nicolaides P, 'Control of State Aid in the European Union Compliance, Sanctions and Rational Behaviour' (2002) 25 World Competition

——, 'Decentralised State Aid Control in an Enlarged European Union: Feasible, Necessary or Both?' (2003) 26 World Competition

——, 'State Aid Modernization: Institutions for Enforcement of State Aid Rules' (2012) 35 World Competition

——, 'An Economic Assessment of the Usability of the New General Block Exemption Regulation for State Aid (Regulation 651/2014)' (2014) 10 European Competition Journal

Nowak-Salles A, 'Evidence Requirements in the State Aid Compatibility Assessment' (2018) 17 European State Aid Law Quarterly 212

——, 'Individual Concern in the State Aid Action for Annulment in Light of the Notion of State Aid' [2019] European Competition Journal

Ordóñez-Solís D, 'Waiting for National Judges in Infringement Proceedings on State Aid' (2017) 16 European State Aid Law Quarterly

Pistone P, 'The Growing Importance of the Prohibition of State Aids in Tax Matters' (2012) 40 Intertax 84

Podsiadło P, 'Efektywność Udzielania Pomocy Publicznej w Państwach Członkowskich UE – Mit Czy Rzeczywistość?' (2016) 15 Problemy Zarządzania

Polinsky AM and Shavell S, 'Legal Error, Litigation, and the Incentive to Obey the Law' (1989) 5 Journal of Law, Economics & Organization 99

Popović DV and Caka F, 'State Aid Control in South-East Europe: Waiting for a Wake-up Call' (2017) 18 European Business Organization Law Review

Posner RA, 'An Economic Approach to Legal Procedure and Judicial Administration' (1963) 2 The Journal of Legal Studies 399

——, 'An Economic Approach to the Law of Evidence' (1999) 51 Stanford Law Review 1477

Quigley C, 'The European Commission's Programme for State Aid Modernization' (2013) 20 Maastricht Journal of European and Comparative Law

Robins N and Geldof H, 'Ex Post State Aid Analysis: First Impressions' (2018) 17 European State Aid Law Quarterly

Rose-Ackerman S, 'Progressive Law and Economics- and the New Administrative Law' (341AD) 1 The Yale Law Journal 1988

Sarmiento D, 'The Reform of the General Court: An Exercise in Minimalist (but Radical) Institutional Reform' (2017) 19 Cambridge Yearbook of European Legal Studies

Schinkel MP and Tuinstra J, 'Imperfect Competition Law Enforcement' (2006) 24 International Journal of Industrial Organization 1267

Scott A, 'Co-Operation and Good Faith: State Aid Rules and National Courts – Procedural and Interpretive Consequences' (2017) 16 European State Aid Law Quarterly

Segura Catalán M, Clayton M and Nowak-Salles A, 'Third Party Rights and the State Aid Procedures Revisited by the European Courts: An Ever-Sounder State Aid Control' (2019) 10 Journal of European Competition Law & Practice

Seo KK and Peterson RE, 'Public Administration Planning in Developing Countries a Bayesian Decision Theory Approach' (1972) 3 Policy Sciences

Shavell S, 'The Appeals Process as a Means of Error Correction' (1995) 24 The Journal of Legal Studies 379

——, 'The Appeals Process and Adjudicator Incentives, Working Paper No. 10754' [2004] National Bureau of Economic Research

Sinnaeve A, 'Block Exemptions for State Aid: More Scope for State Aid Control by Member States and Competitors' (2001) 38 Common Market Law Review

Slot PJ, 'Procedural Aspects of State Aids the Guardian of Competition versus the Subsidy Villains' 27 Common Market Law Review 741

Soltesz U and Schatz F, 'State Aid for Environmental Protection The Commission's New Guidelines and the New General Block Exemption Regulation' (2009) 6 Journal for European Environmental & Planning Law

Stigler GJ, 'The Theory of Economic Regulation' (1971) 2 The Bell Journal of Economics and Management Science 3

Sykes AO, 'The Economics of WTO Rules on Subsidies and Countervailing Measures' (2003)

Tebano L, 'State Aid for Employment after the New General Block Exemption Regulation' (2015) 14 European State Aid Law Quarterly

Tom WK and Pak C, 'Toward a Flexible Rule of Reason' (2000) 68 Antitrust Law Journal 391

Vandersanden G, 'Pour Un Élargissement Du Droit Des Particuliers d'agir En Annulation Contre Des Actes Autres Que Les Décisions Qui Leur Sont Adressées' [1995] Cahiers de droit européen 535

Varju M, 'The Right to Effective Judicial Protection in Community Law Intervention before Community Courts' (2005) 46 Acta Juridica Hungarica 51

Verouden V, 'EU State Aid Control: The Quest for Effectiveness' (2015) 14 European State Aid Law Quarterly 459

Wood DP, 'Cuno v. Daimler Chrysler, Inc. State "Aids" from an American Perspective' (2007) 6 European State Aid Law Quarterly 8

Woodcock RA, 'Per Se in Itself: How Bans Reduce Error in Antitrust' (35th Annual Conference of the European Association of Law ad Economics 2018)

Yelderman S, 'The Value of Accuracy in the Patent System' University of Chicago Law Review

Zaring D, 'Sovereignty Mismatch and the New Administrative Law' (2013) 91 Washington University Law Review 59

Theses

Broulík J, 'Economics in Legal Decision-Making' (Tilburg University and Charles University 2017)

Fauré V, 'L'apport Du Tribunal de Première Instance Des Communautés Européennes Au Droit Communautaire de La Concurrence' (Nouvelle Bibliothèque de Thèses 2005)

Mendes J, 'Rights of Participation in European Administrative Law : A Rights-Based Approach to Participation in Rulemaking' (European University Institute 2008)

Pastor Merchante F, 'The Role of Competitors in the Enforcement of State Aid Law' (European University Institute 2014)

Reports

Ahlborn C and others, 'DG Comp's Discussion Paper on Article 82: Implications of the Proposed Framework and Antitrust Rules for Dynamically Competitive Industries' (2006)

American Antitrust Institute, ‘The State of Antitrust Enforcement and Competition Policy in the U.S.’ (2020)

Court of Auditors, ‘Special Report No 15/2011 – Do the Commission’s Procedures Ensure Effective Management of State Aid Control?’ (2011)

——, ‘Annual Report on the Implementation of the Budget Concerning the Financial Year 2015’ (2016)

——, ‘Special Report No 24/2016: More Efforts Needed to Raise Awareness of and Enforce Compliance with State Aid Rules in Cohesion Policy’ (2016)

European Commission, ‘Completing the Internal Market. White Paper from the Commission to the European Council’ (1990)

Oxera, ‘Ex Post Assessment of the Impact of State Aid on Competition’ (2017)

Spark and others, ‘Study on the Enforcement of State Aid Rules and Decisions by National Courts’ (2019)

‘The State of Antitrust Enforcement and Competition Policy in the U.S.’ (American Antitrust Institute 2020)

Judgment of the Court of Justice

Joined cases C-42/59 and 49/59, *S.N.U.P.A.T. v High Authority* (1961) ECLI:EU:C:1961:5

C-25/62, *Plaumann* (1963) ECLI:EU:C:1963:17

C-21/64, *Macchiorlati Dalmas e Figli* v *High Authority* (1965) ECLI:EU:C:1965:30

C-44/65, *Singer* (1965) ECLI:EU:C:1965:122

C-32/65, *Italy* v *Council and Commission* (1966) ECLI:EU:C:1966:42

C-10/68 and 18/68, *Eridania e.a./Commission* (1969) ECLI:EU:C:1969:66

C-120/73, *Lorenz GmbH v Germany* (1973) ECLI:EU:C:1973:152

C-74/76, *Iannelli v Meroni* (1977) ECLI:EU:C:1977:51

C-92/78, *Simmenthal* (1979) ECLI:EU:C:1979:53

C-283/81, *CILFIT* (1982) ECLI:EU:C:1982:335

C-84/82, *Germany v Commission* (1984) ECLI:EU:C:1984:117

C-323/82, *Intermills v Commission* (1984) ECLI:EU:C:1984:345

C-11/82, *Piraiki-Patraiki* (1985) ECLI:EU:C:1985:18

C-264/82, *Timex Corporation v Council and Commission* (1985) ECLI:EU:C:1985:119

C-290/83, *Commission v France* (1985) ECLI:EU:C:1985:37

C-310/85, *Deufil* (1987) ECLI:EU:C:1987:96

C-354/90, *FNCEPA v France* (1991) ECLI:EU:C:1991:440

C-198/91, *Cook* (1993) ECLI:EU:C:1993:197

C-225/91, *Matra v Commission* (1993) ECLI:EU:C:1993:239

C-10/95, *Asocarne* (1995) ECLI:EU:C:1995:406

Joined cases T-244/93 and T-486/93, *TWD* (1995) ECLI:EU:T:1995:160

C-415/93, *Bosman* (1995) ECLI:EU:C:1995:463

C-39/94, *SFEI and Others* (1996) ECLI:EU:C:1996:285

C-56/93, *Belgium v Commission* (1996) ECLI:EU:C:1996:64

C-169/95, *Spain* v *Commission* (1997) ECLI:EU:C:1997:10

C-334/95, *Krüger v Hauptzollamt Hamburg-Jonas* (1997) ECLI:EU:C:1997:378

C-367/95 P, *Commission v Sytraval and Brink's France* (1998) ECLI:EU:C:1998:154

C-99/98, *Austria v Commission* (2001) ECLI:EU:C:2001:94

C-204/97, *Portugal v Commission* (2001) ECLI:EU:C:2001:233

C-50/00, *Unión de Pequeños Agricultores* (2002) ECLI:EU:C:2002:462

C-300/01, *Salzmann* (2003) ECLI:EU:C:2003:283

C-148/04, *Unicredito Italiano* (2005) ECLI:EU:C:2005:774

C-222/04, *Cassa di Risparmio di Firenze* (2006) ECLI:EU:C:2006:8

C-344/04, *IATA and ELFAA* (2006) ECLI:EU:C:2006:10

C-525/04 P, *Spain v Lenzing* (2007) ECLI:EU:C:2007:698

Joined Cases C-75/05 P and C-80/05 P, *Kronofrance v Germany and Others* (2008) ECLI:EU:C:2013:458

C-333/07, *Régie Networks* (2008) ECLI:EU:C:2008:764

Joined Cases C-341/06 P and C-342/06 P, *Chronopost and La Poste* v *UFEX and Others* (2008) ECLI:EU:C:2008:375

C-390/06, *Nuova Agricast* (2008) ECLI:EU:C:2008:224

C-487/06 P, *British Aggregates* (2008) ECLI:EU:C:2008:757

C-519/07 P, *Commission v Koninklijke Friesland Campina* (2009) ECLI:EU:C:2009:556

C-138/09, *Todaro Nunziatina & C.* (2010) ECLI:EU:C:2010:291

C-290/07 P, *Commission v Scott* (2010) EU:C:2010:480

C-362/09, *Athinaïki Techniki v Commission* (2010) ECLI:EU:C:2010:783

C-83/09 P, *Kronoply* (2011) ECLI:EU:C:2011:341

C-274/12 P, *Telefónica v Commission* (2013) ECLI:EU:C:2013:852

C-646/11 P, *3F v Commission* (2013) ECLI:EU:C:2013:36

C-133/12 P, *Stichting Woonlinie* (2014) ECLI:EU:C:2014:105

C-559/12P, *France v Commission* (2014) ECLI:EU:C:2014:217

C-33/14 P, *Mory* (2015) ECLI:EU:C:2015:609

Joined cases C-587/13 P and C-588/13 P, *Banco Bilbao Vizcaya Argentaria* (2015) ECLI:EU:C:2015:18

C-667/13, *Banco Privado Português and Massa Insolvente do Banco Privado Português* (2015) ECLI:EU:C:2015:151

C-486/15P, *Commission v France and Orange* (2016) ECLI:EU:C:2016:912

C-493/14, *Dilly's Wellnesshotel GmbH v Finanzamt Linz* (2016) EU:C:2016:577

C-563/14 P, *Dansk Automat* (2016) ECLI:EU:C:2016:303

C-300/16, *Commission v Frucona Košice* (2017) ECLI:EU:C:2017:706

C-415/15 P, *Stichting Woonpunt and Others v Commission* (2017) ECLI:EU:C:2017:216

C-622/16 P, *Scuola Elementare Maria Montessori v Commission* (2018) ECLI:EU:C:2018:873

C-349/17, *Eesti Pagar* (2019) ECLI:EU:C:2019:172

C-627/18, *Nelson Antunes da Cunha* (2020) ECLI:EU:C:2020:321

Opinions of Advocates General

Opinion of AG Jacobs in case C-358/89, *Extramet Industrie* (1991) ECLI:EU:C:1991:144

Opinion of AG Jacobs in case C-269/90, *Technische Universität München v Hauptzollamt München-Mitte* (1991) ECLI:EU:C:1991:317

Opinion of AG Fennelly in case C-56/93, *Belgium v Commission* (1996) ECLI:EU:C:1996:64

Opinion of AG Jacobs in case C-24/95 *Land Rheinland-Pfalz v Alcan Deutschland* (1996) ECLI:EU:C:1996:433

Opinion of AG Jacobs in case C-99/98, *Austria v Commission* (2000) ECLI:EU:C:2000:396

Opinion of AG Jacobs in case C-50/00, *Unión de Pequeños Agricultores* (2002) ECLI:EU:C:2002:197

Opinion of AG Jacobs in case C-78/03 P, *Commission v Aktionsgemeinschaft Recht und Eigentum* (2005) ECLI:EU:C:2005:106

Opinion of AG *Stix-Hackl* in case C-148/04, *Unicredito Italiano* (2005) ECLI:EU:C:2005:522

Judgments of the General Court

T-49/93, *SIDE* (1995) ECLI:EU:T:1995:166

T-435/93, *ASPEC* (1995) ECLI:EU:T:1995:79

T-442/93, *ACC* (1995) ECLI:EU:T:1995:80

T-380/94, *AIUFFASS and AKT v Commission* (1996) ECLI:EU:T:1996:195

T-330/94, *Salt Union* (1996) ECLI:EU:T:1996:154

Joined cases T-371/94 and T-394/94, *British Airways and Others* (1998) ECLI:EU:T:1998:140

T-138/98, *ACAV e.a*. (2000) ECLI:EU:T:2000:45

Joined cases T-172/98, T-175/98 to T-177/98, *Salamander* (2000) ECLI:EU:T:2000:168

T-296/97, *Alitalia* (2000) ECLI:EU:T:2000:289

T-197/97, *Weyl Beef Products and Others v Commission* (2001) ECLI:EU:T:2001:28

T-222/00, *Otto Wöhr v Commission* (2001) ECLI:EU:T:2001:274

T-126/99, *Graphischer Maschinenbau* v *Commission* (2002) ECLI:EU:T:2002:116

T-36/99, *Sniace* (2004) ECLI:EU:T:2004:312

T-308/00, *Salzgitter v Commission* (2004) ECLI:EU:T:2013:30

T-95/03, *Asociación de Estaciones de Servicio de Madrid and Federación Catalana de Estaciones deServicio* (2006) ECLI:EU:T:2006:385

T-210/02, *British Aggregates* v *Commission* (2006) ECLI:EU:T:2006:253

T-25/04, *González y Díez* (2007) ECLI:EU:T:2007:257

T-141/03, *Sniace* (2007) ECLI:EU:C:2007:700

T-289/03, *BUPA and Others* v *Commission* (2008) ECLI:EU:T:2008:29

T-162/06, *Kronoply* (2009) ECLI:EU:T:2009:2

T-369/06, *Holland Malt v Commission* (2009) ECLI:EU:T:2009:319

T-375/04, *Scheucher-Fleisch* (2009) ECLI:EU:T:2009:445

T-388/03, *Deutsche Post* (2009) ECLI:EU:T:2009:30

T-102/07, *Freistaat Sachsen and Others v Commission* (2010) ECLI:EU:T:2010:62

T-440/07, *Huta Buczek v Commission* (2010) ECLI:EU:T:2010:346

T-54/07, *Vtesse Networks* (2011) ECLI:EU:T:2011:15

T-1/08, *Buczek Automotive v Commission* (2011) ECLI:EU:T:2011:216

Joined cases T-394/08, T-408/08, T-453/08 et T-454/08, *Regione autonoma della Sardegna e.a.*, (2011) ECLI:EU:T:2011:493

Joined cases T-29/10 and T-33/10, *Netherlands and ING Groep NV v European Commission* (2012) ECLI:EU:T:2012:98

T-80/06, *Budapesti Erőmű v Commission* (2012) ECLI:EU:T:2012:65

T-90/09, *Mojo concerts* (2012) ECLI:EU:T:2012:30

T-123/09, *Ryanair v Commission* (2012) ECLI:EU:T:2012:164

T-139/09, *France v Commission* (2012) ECLI:EU:T:2012:496

T-304/08, *Smurfit Kappa Group* (2012) ECLI:EU:T:2012:351

T-182/10, *Aiscat* (2013) ECLI:EU:T:2013:9

T-57/11, *Castelnou Energía v Commission* (2014) ECLI:EU:T:2014:1021

T-319/11, *ABN Amro* (2014) ECLI:EU:T:2014:186

T-362/10, *Vtesse Networks* (2014) ECLI:EU:T:2014:928

T-601/11, *Dansk Automat Brancheforening* (2014) ECLI:EU:T:2014:839

T-488/11, *Sarc* (2014) ECLI:EU:T:2014:497

T-512/11, *Ryanair* (2014) ECLI:EU:T:2014:989

T-58/13, *Club Hotel Loutraki AE and Others v European Commission* (2015) ECLI:EU:T:2015:1

T-89/09, *Pollmeier Massivholz v Commission* (2015) ECLI:EU:T:2015:153

T-125/12, *Viasat Broadcasting UK v Commission* (2015) ECLI:EU:T:2015:687

T-305/13, *SACE and Sace BT v Commission* (2015) ECLI:EU:T:2015:435

T-511/09, *Niki Luftfahrt v Commission* (2015) ECLI:EU:T:2015:284

T-57/15, *Trajektna luka Split d.d. v Commission* (2016) ECLI:EU:T:2016:470

T-79/14, *Secop v Commission* (2016) ECLI:EU:T:2016:118

T-103/14, *Frucona Košice* (2016) ECLI:EU:T:2016:152

T-220/13, *Scuola Elementare Maria Montessori v Commission* (2016) ECLI:EU:T:2016:484

T-382/15, *Greenpeace* (2016) ECLI:EU:T:2016:589

Joined Cases T-479/11 and T-157/12, *France v Commission* (2016) ECLI:EU:T:2016:320

T-68/15, *HH Ferries I/S, formerly Scandlines Øresund I/S and Others v Commission* (2018) ECLI:EU:T:2018:563

T-79/16, *Vereniging Gelijkberechtiging Grondbezitters and Others v Commission* (2018) ECLI:EU:T:2018:680

T-108/16 *Naviera Armas v Commission* (2018) ECLI:EU:T:2018:145

T-286/15, *KF v CSUE* (2018) ECLI:EU:T:2018:718

T-630/15, *Scandlines Danmark ApS and Scandlines Deutschland GmbH v Commission* (2018) ECLI:EU:T:2018:942

T-631/15, *Stena Line Scandinavia AB v Commission* (2018) ECLI:EU:T:2018:944

T-747/15, *EDF v Commission* (2018) ECLI:EU:T:2018:6

T-793/14, *Tempus Energy Ltd and Tempus Energy Technology Ltd v Commission* (2018) ECLI:EU:T:2018:790

T-813/16, *Abes v Commission* (2018) ECLI:EU:T:2018:189

T-818/14, *BSCA v Commission* (2018) ECLI:EU:T:2018:33

Joined cases T-131/16 and T-263/16, *Belgium and Magnetrol International v Commission* (2019) ECLI:EU:T:2019:91

T-492/15, *Deutsche Lufthansa v Commission* (2019) ECLI:EU:T:2019:252

T-894/16, *Air France v Commission* (2019) ECLI:EU:T:2019:508

Pending cases

C-453/19, *Deutsche Lufthansa v Commission*

C-594/19, *Deutsche Lufthansa v Commission*

Decisions of the European Commission

Commission Decision 2001/673/EC of 28 March 2001

Commission Decision of 27 January 2008 on State aid C27/08

Commission Decision of 28 January 2009 in State aid case C 43/02

Commission Decision 2010/174/EC of 10 March 2009 on the State aids C 43/07 (ex N 64/07) and C 44/05 (ex NN 79/05, ex N 439/04)

Commission Decision of 17 November 2009 on State aid N 627/2009

Commission Decision of 15 December 2009 in State aid case n° C 5/2009

Commission Decision 2015/1321 of 23 June 2010 on State aid C 38/07 (ex NN 45/07)

Commission Decision of 25 July 2012 on State aid case SA.29064

Commission Decision of 17 July 2013 on State aid SA.33412

Commission Decision of 20 November 2013 on State aid SA.35092

Commission Decision of 11 March 2014 on State aid SA.38129

Commission Decision of 27 March 2014 on State aid SA.37131

Commission Decision of 11 June 2014 on State aid SA.18832

Commission Decision 2015/1091 of 9 July 2014

Commission Decision 2016/632 of 9 July 2014

Commission Decision of 9 July 2014 on State aid SA.18042

Commission Decision 2015/1583 of 4 August 2014

Commission Decision 2015/1585 of 25 November 2014

Commission Decision 2015/1073 of 9 January 2015

Commission Decision of 16 January 2015 on the State aid SA.31855

Commission Decision 2016/288 of 27 March 2015

Commission Decision of 16 April 2015 in State aid cases SA.39723, SA.39724, SA.39725, SA.39726, SA.39731, SA.39732, SA.39733, SA.39735, SA.39738, SA.39739, SA.39741,

SA.39742 (2014/N); SA.39722, SA.39727, SA.39728, SA.39729, SA.39730, SA.39734, SA.39736, SA.39740

Commission Decision 2016/289 of 8 June 2015

Commission Decision of 24 June 2015 on State aid SA.34992

Commission Decision of 16 July 2015 on State aid SA.38528

Commission Decision of 23 July 2015 on State aid SA.39078

Commission Decision of 14 August 2015 on State aid SA.39457

Commission Decision 2017/1436 of 1 December 2015

Commission Decision of 5 July 2016 on State aid SA.19864 - 2014/C (ex 2009/NN54)

Commission Decision 2017/503 of 8 November 2016

Commission Decision 2017/1494 of 19 December 2016

Commission Decision 2017/1021 of 10 January 2017

Commission Decision of 26 October 2018 on State aid SA.43260

Commission Decision of 26 September 2019 on SA.35179

Legal acts

Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union (2016/C 262/01)

Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty

Commission Staff Working Document, Common methodology for State aid evaluation, SWD(2014) 179 final

Communication from the Commission: Europe 2020 - A strategy for smart, sustainable and inclusive growth, COM(2010) 2020 final

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, EU State Aid Modernisation, COM/2012/0209 final

Communication from the Commission. Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (2014/C 249/01), OJ C 244, 1.10.2004

Communication from the Commission. Framework for State aid for research and development and innovation (2014/C 198/01), OJ C 198, 27.6.2014

Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty**,** OJ L 83, 27.3.1999

Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 4.1.2003, p. 1–25

Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, OJ L 24, 29.1.2004, p. 1–22

Council Regulation 2015/1589 of 13 July 2015 laying down detailed rules for the application of Article 108 of the Treaty on the Functioning of the European Union, OJ L 248, 24.9.2015, p. 9-29

Court of Justice of the European Union, Reconmmandations to national courts and tribunals in relation to the initiation of preliminary ruling proceedings (2012/C 338/01)

European Commission. State aid action plan - Less and better targeted state aid : a roadmap for state aid reform 2005-2009, SEC(2005) 795

European Commission. State Aid Manual of Procedures. 2013. Internal DG Competition working documents on procedures for the application of Articles 107 and 108 TFEU

European Commission, Code of Best Practices for the conduct of State aid control procedures (2018/C 253/05)

European Commission, Common State aid action plan 2018-2022, Strengthening Member States' Administrative Capacity for the Management of the ESIF in the Field of State Aid

Guidelines on regional State aid for 2014-2020 (2013/C 209/01), OJ C 209, 23.7.2013

Regulation 2015/2422 of the European Parliament and of the Council of 16 December 2015 amending Protocol No 3 on the Statute of the Court of Justice of the European Union, OJ L 341, 24.12.2015, p. 14–17

Rules of Procedure of the General Court**,** OJ 2015 L 105, p. 1

Rules of Procedure of the Court of Justice**,** OJ L 265, 29.9.2012, p. 1–42

Statute of the Court of Justice of the European Union, OJ C 203, 7.6.2016, p. 72–95