

A Quantitative Analysis of Legal Integration and Differentiation in the European Union, 1958–2020

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Abstract

The article provides an innovative, comprehensive quantitative analysis of legal integration and differentiation in the European Union (EU) from 1958 to 2020. Building on a streamlined analytical framework and new or revised datasets on EU primary, EU secondary and EU-related international law, it challenges or qualifies several aspects of the received wisdom on European integration. Specifically, it delivers the first-ever quantitative estimate of integration in terms of integration opportunities, shows that differentiation is deployed in a reluctant and eclectic manner and offers clear measurements for the prevalence of various modes of temporal, spatial and policy differentiation. These methodological and empirical findings confirm the fruitfulness of the quantitative approach to the study of European integration and point to promising avenues for future research on international integration and comparative regionalism.

Keywords: legal differentiation; differentiated integration; European integration

Introduction

Ten years ago, a review article on differentiated integration (DI) in the European Union (EU) summarized the state of the research as one of ‘many concepts, sparse theory, few data’ (Holzinger and Schimmelfennig 2012). Since then, tremendous progress has been made in its empirical analysis, explanation and evaluation (Bellamy et al. 2022; De Witte et al. 2017; Leruth et al. 2022; Leuffen et al. 2022; Sielmann 2020; Telle et al. 2022). Beyond a large number of qualitative studies on specific policy domains, legal tools and cases, an emerging body of quantitative research has started to painstakingly and comprehensively map the prevalence of legal differentiation in EU primary and secondary law (Duttler 2016; Duttler et al. 2017; Schimmelfennig and Winzen 2014, 2020a, 2020b) as well as the relevance of alternative forms of flexibility and non-compliance (Börzel 2021; Zbiral et al. 2022).

However, some important questions remain unanswered. First, can the evidence collected be used to provide a quantitative estimate of the degree of integration achieved by the EU over time? Whilst older operationalizations of integration in terms of legal output have been harshly criticized (Börzel 2005, p. 220), the above-mentioned datasets remove a crucial objection by counting all consolidated legal acts in force in each given year instead of newly enacted legal acts. Secondly, can the findings on the patterns of differentiation reached for a specific type of legal act be generalized across all kinds of legal instruments? As yet, this has not been satisfactorily accomplished. Thirdly, can firm conclusions be drawn on the prevalence of different modes of DI: multi-speed, multi-tier and multi-menu (Schimmelfennig and Winzen 2020a; Stubb 1996)? Despite their popularity, these concepts have so far been applied in a rather impressionistic and selective fashion.

Finally, how has DI evolved over the past decade, including under the unprecedented impact of Brexit? Whilst published analyses do not extend beyond 2018 for primary differentiation (Schimmelfennig and Winzen 2020a) and 2012 for secondary differentiation (Duttler et al. 2017), the corresponding datasets have recently been updated until 2020 (Schimmelfennig and Winzen 2022a, 2022b) and allow an examination of recent trends.

This article seeks to fill these gaps by providing a comprehensive quantitative analysis of integration and differentiation in the EU from 1958 to 2020 across three legal domains: EU primary law, EU secondary law and EU-related international law. Based on consistent operationalizations of the relevant concepts and a large body of empirical evidence contained in two thoroughly revised existing datasets (EUDIFF1rev, EUDIFF2rev) and a newly compiled one (EUDIFF3), it provides clear answers to the above-mentioned questions, partly confirming and partly challenging the received wisdom of the existing literature. More broadly, it shows that legal differentiation in the EU is reluctant and eclectic, being deployed in an infrequent and highly constrained way and characterized by inconsistent patterns across legal domains, periods, countries and policy areas.

The article is structured as follows. In the first section, I develop a streamlined methodology to measure legal integration and differentiation, reviewing the appropriate definition and operationalization of the relevant concepts, the construction of the three datasets and the strengths and limitations of the quantitative approach. In the second section, I present the findings of my descriptive analysis of the empirical patterns of legal integration and differentiation in EU history. In the third section, I discuss the broader implications of these findings. In the concluding section, I briefly summarize the analysis and point to promising avenues for future research.

I. Measuring Legal Integration and Differentiation

Definitions and Operationalizations

The measurement of DI presupposes the adoption of clear and relevant definitions and their operationalization in terms of quantifiable indicators. In this section, building on previous work by quantitative researchers, I provide improved definitions for six concepts (integration, differentiated integration, differentiation, temporal differentiation, spatial differentiation and policy differentiation) and identify the most appropriate indicators to measure them.

My key methodological innovation is the adoption of a focus on the metric of potential *integration opportunities* (rules times years times countries), which is inspired by the existing concept of differentiation opportunities (Schimmelfennig and Winzen 2014, 2020a) but separately counts every opportunity rather than aggregating them by policy areas. For example, the 1025 legislative acts in force in 2020, multiplied by 27 member states, yield 27,675 potential integration opportunities: 26,755 of those (96.7 per cent) were integrated, whilst 920 (3.3 per cent) were differentiated, containing partial or full derogations for the country in question. This method greatly expands the number of available observations and enables a more accurate assessment of patterns in terms of the member states affected, reflecting both the deepening and widening of European integration.

The concept of international *integration* is notoriously difficult to define and quantify. On the one hand, it is an umbrella term referring to a wide range of distinct phenomena, such as the removal of barriers, the growth of transactions, rising interdependence, the centralization of structures and the convergence of national systems; moreover, it has at least four dimensions: economic, social, political and ideational (Checkel and Katzenstein 2009; Eppler et al. 2016; Molle 2006; Nye 1968). On the other hand, it can be measured in different ways: for political integration, for instance, indicators on shared decision-making (Börzel 2005; Lindberg 1970; Schimmelfennig et al. 2015), EU resources (Laffan and Lindner 2020) and legislative and administrative output (Schimmelfennig and Winzen 2020a; Wessels 1997) have been used. Following an established tradition, I adopt a political, formal, legal and internal definition of integration; this choice excludes from the analysis important aspects but delimits a relevant, coherent and measurable empirical referent. I therefore define integration, adapting slightly the definition of Schimmelfennig and Winzen (2020a, p. 15), as a process of expansion of the body of shared legal rules applying to the states participating in a given international integration project: in this case, the EU. Unlike the previous definition, I explicitly include rules derived from both EU and international law. The concept can be operationalized in terms of integrated opportunities, that is, the number of potential integration opportunities actually used by EU member states at any given time.

The concepts of *differentiated integration* and *differentiation* are less complex, but existing definitions present ambiguities that hamper the identification of clear empirical referents, particularly when the analysis moves from the general nature of legal rules to their concrete applicability to specific countries (Duttle 2016, p. 117; Duttle et al. 2017, p. 410; Schimmelfennig and Winzen 2014, p. 357, 2020a, p. 15). Firstly, both terms are related to the territorially unequal validity of shared rules, but they may be used either as synonyms or as opposites. Secondly, DI can indicate a process encompassing all countries potentially affected by a given differentiated rule, only those countries that are fully integrated, or only those countries that are not fully integrated. Thirdly, country-based differentiations are normally treated as a unified category, but partial differentiations (selective derogations and special provisions) are a form of integration, whilst full differentiations (complete opt-outs) are not. The most practical, albeit not unproblematic, solution is to treat DI, uniform integration and differentiation as mutually exclusive and collectively exhaustive sub-categories of potential integration. Thus, DI will come to refer to selectively applicable shared legal rules and the related integrated opportunities; differentiation to full or partial exemptions to rules and the related differentiated (i.e. non-fully integrated) opportunities; and uniform integration to universally applicable rules and the related integrated opportunities. Whenever applied to a specific rule rather than an overall process, in accordance with common usage, the term (individual) differentiation will refer to a country-based exemption considered in its total duration, which can therefore generate multiple differentiated opportunities. A further distinction will also be made between partial and full differentiations, but consistent measurement of the two is not always possible.

Finally, the three main modes of DI identified in the literature (multi-speed, multi-tier and multi-menu) require more adaptation (Schimmelfennig and Winzen 2020a, pp. 17–19; Stubb 1996). On the one hand, each of them mixes potentially contradictory criteria, particularly at an aggregate level of analysis: (a) the distribution of individual

differentiations by time, country or policy area and (b) their structuring around coherent groups of states. On the other hand, it is unclear whether the modes are meant to be mutually exclusive or potentially overlapping. Whilst several solutions are possible, I choose to redefine each mode around the key criterium originally identified by Stubb (1996) – time, space and policy – and treat them as independent and potentially overlapping phenomena: a solution that yields the most intuitive and elegant results.

Existing definitions of multi-speed DI refer to a temporary structuring of the EU, in which vanguard groups of states push forward with new initiatives and laggard countries eventually catch up over time. However, temporary differentiations do not necessarily lead to the formation of distinct groups and may never lead to uniformity. These ambiguities can be eliminated by reframing the problem in terms of *temporal differentiation*, classifying differentiated opportunities as temporary (ceased to exist over time) or permanent (still in force). Thus, multi-speed differentiation becomes a temporal pattern of differentiation characterized by a high prevalence of temporary differentiated opportunities, in opposition to what might be called multi-end differentiation. It can be measured with a simple indicator showing the share of temporary over total differentiated opportunities: the higher the value, the stronger the multi-speed character of differentiation.

Existing definitions of multi-tier DI refer to a permanent spatial structuring of the EU between a highly integrated core tier and less integrated peripheral tiers. However, integration gaps between countries can be the result of different speeds, permanent differentiations may not lead to a hierarchical structure, the position of each country across acts, legal domains and policy areas can be inconsistent, and tiers may be fuzzy and heterogeneous. The logical solution is to reframe the problem in terms of *spatial differentiation*, measuring the distribution of differentiated opportunities by country. Thus, multi-tier differentiation becomes a spatial pattern of differentiation characterized by a high concentration of differentiated opportunities amongst specific countries, in opposition to what might be called single-tier differentiation. This can be measured synthetically with standard indicators of statistical dispersion (e.g. Gini coefficient, standard deviation) for country-based differentiation rates: the higher the value, the stronger the multi-tier character of differentiation. Still, such indicators do not tell us anything about the actual nature of tiers. In a second step of the analysis, countries can be grouped into tiers and additional indicators for their number, composition (number of units), level of differentiation (aggregate rate), internal cohesion (standard deviation), size (share of total opportunities) and overall impact (share of differentiated opportunities) can be provided.

Existing definitions of multi-menu DI refer to a permanent policy-based structuring of integration, with a small ‘fixed menu’ of uniformly integrated policy areas, a larger number of ‘optional courses’ that countries can pick and choose and no large integration differences amongst members. However, an evenly distributed policy-based differentiation may still be accompanied by a hierarchical spatial structure, and ‘courses’ inevitably lose their internal coherence at a high aggregation level, as countries rarely opt out from entire policy areas. It seems reasonable to reframe the problem in terms of *policy differentiation*, measuring the distribution of differentiated opportunity by area and proceed analogously to the previous case. Thus, multi-menu differentiation becomes a policy-based pattern of differentiation characterized by an even spread of differentiated opportunities across policy areas, in opposition to what might be called single-menu differentiation. This can be measured with standard indicators of statistical dispersion for policy-based differentiation

rates (the lower the value, the stronger the multi-menu character of differentiation), whilst additional indicators can be used to assess the features of grouped policy domains.

Data and Methods

In order to adequately capture different kinds of legal integration and differentiation, three quantitative datasets have been compiled (Chiocchetti 2023), each covering consolidated legal rules in force from 1958 to 2020 (Table 1).

The first dataset, EUDIFF1rev, deals with differentiation in EU primary law, specifically in treaty articles. It is a revised version of the existing EUDIFF1 dataset (Schimmelfennig and Winzen 2022a). Compared with the original, I have removed the years from 1952 to 1957 as well as a number of EU-related international treaties not part of the EU legal order and coded additional variables on the temporal permanence of differentiations. The revised version covers all EU treaties and their subsequent amendment in protocols, amending treaties and accession treaties, for a total of 11 consolidated treaties, 1,517 treaty articles, 57,500 rows (articles times years) and 874,181 opportunities (articles times years times countries).

The second dataset, EUDIFF2rev, deals with differentiation in EU secondary law, specifically in legislative acts. It is an updated and revised version of the existing EUDIFF2 dataset (Schimmelfennig and Winzen 2022b). Compared with the original, I have merged and harmonized the two files provided (in particular, removing the United Kingdom as a member state in 2020), manually verified and not infrequently altered the coding for each recorded differentiation, and coded additional variables on the temporal permanence and extent of differentiations. The revised version covers all EU legislative acts (regulations, directives and former Third Pillar decisions) and their subsequent amendments, for a total of 4967 consolidated acts, 56,742 rows (acts times years), and 1,052,162 opportunities (acts times years times countries).

The third dataset, EUDIFF3, deals with differentiation in EU-related international law, specifically in international treaties. I compiled it for this article to fill a gap in the literature on differentiation resulting from the use of legal instruments outside of EU law. It includes a selection of regional treaties closely connected to European integration and involving

Table 1: Quantitative Datasets on Differentiated Integration.

	<i>EUDIFF1rev</i>	<i>EUDIFF2rev</i>	<i>EUDIFF3</i>
Scope	EU primary law	EU secondary law	EU-related international law
Time	1958–2020	1958–2020	1958–2020
Countries	28 member states	28 member states	28 member states
Unit of analysis	treaty articles	legislative acts	international treaties
Type of differentiation coded	some	some, full	full
Legal acts	11	4967	40
Articles	1517	-	-
Rows	57,500	56,742	1222
Opportunities	874,181	1,042,162	21,269
Differentiations	3170	2896	427
Differentiated opportunities	26,450	20,877	-
Fully differentiated opportunities	-	3841	4391

obligations that might reasonably have been carried out within the framework of the EU Treaties: for instance, agreements that were ultimately fully or partially repatriated within EU law (e.g. the Schengen regime), treaties creating EU-related organizations restricted to EU members (e.g. the European University Institute) and treaties creating alternative European organizations that, under different circumstances, could be replaced by EU policies or by EU international agreements (e.g. the North Atlantic Treaty Organization). It excludes instead both global multilateral agreements (e.g. the United Nations) and merely bilateral or small-scale regional treaties (e.g. the Franco-German Élysée Treaty or the Alpine Convention). The resulting dataset covers a total of 40 treaties, 1222 rows (treaties times years) and 21,269 opportunities (treaties times years times countries).

Strengths and Limitations

The methodology adopted in this article substantially contributes to our understanding of integration and differentiation. In general terms, the adoption of a quantitative approach brings with it its typical strengths: the systematic coverage of cases, precise measurement of variables and numerical shape of the evidence enable a fine-grained descriptive analysis of empirical phenomena, the formulation of precise synthetic assessments and the testing of explanatory hypotheses and theories with statistical methods. More specifically, the datasets and indicators used make several improvements on existing data and methods (Duttie et al. 2017; Schimmelfennig and Winzen 2020a), allowing the first-ever estimates of overall integration levels, differentiation deriving from international law instruments and full differentiation in EU secondary law, as well as an extension of the analysis to recent developments including Brexit and the testing of the received wisdom against a broader and more consistent empirical evidence, resulting in the qualification and falsification of many insights. At the same time, my work could not fully overcome some important practical and structural limitations, pointing to the need for further research, interpretive prudence and methodological triangulation.

Firstly, the comprehensiveness of each dataset strongly varies. EUDIFF1rev covers the virtual entirety of EU primary law, excluding only the impact of general principles developed by the Court of Justice. EUDIFF2rev, however, only explores a subset of EU secondary law (legislative acts), excluding non-general or non-binding sources that may nevertheless play a highly important role on the actual shape of EU policies, such as European Commission decisions on competition issues, European Central Bank decisions on monetary issues and European Council joint actions and common positions on foreign and security issues. EUDIFF3 provides a relatively comprehensive small sample of international treaties closely connected to the European integration process, but it only scratches the surface of differentiation in the EU arising from the use of international law instruments, where no obvious boundary between relevant and non-relevant agreements exists. Finally, no comparative dataset on national legislation is currently available, preventing a full assessment of the ultimate impact of supranational legal integration as well as of more informal processes of legal convergence. These issues can theoretically be tackled by further coding efforts.

Secondly, the three datasets are not entirely homogenous. On the one hand, their unit of analysis differs: individual articles in EUDIFF1rev, entire acts in EUDIFF2rev and entire treaties in EUDIFF3. This logically follows from the specific nature of each legal

domain but prevents an aggregation of data across them. On the other hand, the meaning of differentiation also varies: opportunities are coded as differentiated if they exhibit *some* degree of exemption in EUDIFF1rev but only if they exhibit a *full* exemption in EUDIFF3; in EUDIFF2rev, both measures are provided, as coding on full differentiations was added to the original dataset. It is unclear whether all these issues can be corrected by a more consistent coding procedure, as EU Treaties, legislative acts and international treaties operate at different hierarchical levels and may be intrinsically incommensurable.

Thirdly, the coding of individual rules is not always unambiguous. Differentiations are often absent in the actual legal text examined and must be inferred from explicit or implicit provisions contained in other legal provisions. In addition, it is sometimes difficult to correctly identify norm and exception, particularly in EU secondary law. Whilst the final coding has been repeatedly checked, it may still miss or miscode a certain number of differentiated opportunities.

Fourthly, alternative ways to measure differentiation may yield slightly or markedly different results. Previous analyses, for instance, have measured differentiated acts or policy chapters rather than country-based integration opportunities and counted multiple exemptions for a state from the same rule separately rather than once (Duttle 2016; Duttle et al. 2017; Schimmelfennig and Winzen 2014, 2020a). My choices allow a more consistent and comprehensive exploration of the body of evidence, providing improved estimates for all relevant indicators, but remain contestable.

Finally, and most importantly, the quantitative evidence encompassed in the dataset does not capture qualitative differences in the relative importance of specific differentiations, member states and rules. Thus, a minor exemption granted to Luxembourg on services provided by self-employed persons active in film production (Council Directive 70/451/EEC) counts as much as a total opt-out granted to the United Kingdom on the adoption of the euro as official currency (Council Regulation 974/98). Whilst one of these issues might be obviated by weighting national results by the resident population or the GDP of each country, no reasonable way to solve the other two currently exists.

II. Empirical Patterns of Legal Integration and Differentiation

The data and methods presented in the previous section enable a detailed and comprehensive descriptive analysis of the empirical patterns of legal integration and differentiation in the EU from 1958 to 2020. In particular, precise figures can be calculated with reference to three legal domains (EU treaty articles, EU legislative acts and EU-related international treaties), multiple temporal standpoints and a great number of indicators. The analysis will explore in sequence five issues: overall integration, differentiated integration, differentiation, temporal differentiation, spatial differentiation and policy differentiation.

Overall Integration: An Impressive but Slowing Growth

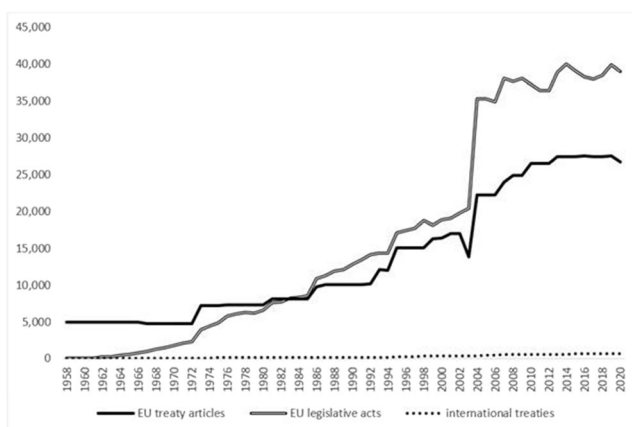
The literature is unanimous in detecting a powerful and relatively continuous trend towards the deepening and widening of the EU, despite some periods of stagnation or regression, but its precise shape remains unclear or controversial (Börzel 2005; Gilbert 2021; Schimmelfennig et al. 2015). My calculations enable for the first time a

precise quantitative description of the evolution of integrated opportunities across various legal domains, showing an impressive but slowing growth (Figure 1).

All indicators follow a powerful upward trend, driven by successive enlargements, increased output in existing and new policy areas and the partial catching-up of integration laggards. Integrated opportunities between 1958 and 2020 rose from 5015 to 26,755 in EU treaty articles, from 14 to 39,046 in EU legislative acts and from 35 to 675 in international treaties. The shape of the three curves is broadly coherent but with important specificities, with a particularly strong rate of growth in secondary legislation and frequent periods of stagnation in primary legislation. Their joint evolution points to three relatively well-defined periods: (a) an initial period of consolidation (1958–1972), in which secondary legislation caught up with the competences conferred by the newly established Treaties; (b) a middle period of rapid integration (1973–2013), in which all indicators grew at a faster pace and boomed in 2004 as a consequence of the Eastern enlargement; and (c) a final period of stagnation (2014–2020), in which only opportunities in international law continued to increase whilst the modest gains in EU law were wiped out by Brexit in 2020. The latter, in particular, determined a loss of 3.6 per cent of integrated opportunities across legal domains compared to a counterfactual scenario.

Altogether, the quantitative evidence on legal integration suggests a novel appreciation of some aspects of the European integration process, negating the widespread belief in a slowdown of integration from the late 1960s to the mid-1980s, emphasizing the importance of the 2004 enlargement and relativizing the negative impact of Brexit. At the same time, it cannot capture key qualitative elements such as the relative importance of each country (e.g. UK vs. smaller post-2003 new members) and individual legal acts (e.g. the 1999 introduction of the euro), the consequences of amending existing norms (e.g. variations in their stringency or financial implications), non-legislative forms of integration (e.g. the enormous resources mobilized since 2010 by the European Central Bank with mere ‘decisions’; the ‘rule of law’ conflict with Poland and Hungary) and the final impact of norms on societal transactions and outcomes (e.g. divergence of eurozone economies after 2007). In fact, developments since 2014 clearly show that an apparent

Figure 1: Integrated Opportunities, 1958–2020 (Absolute Numbers).



stagnation of legal integration can be accompanied by substantial advances in terms of governance, policies and resources.

Differentiated Integration: An Increasingly Common Phenomenon

Past research is also fairly united in the stressing that DI, whilst less frequent than uniform integration, is relatively common in EU law. Estimates of the share of differentiated rules in 2012 set it at 43 per cent in treaty articles, with a strongly rising trend, and at 10 per cent in legislative acts, with a slightly falling trend (Duttle et al. 2017, p. 413; Schimmelfennig and Winzen 2014, p. 358). My calculations broadly confirm the relevance of this phenomenon in EU law and reveal its absolute centrality in EU-related international law (Figure 2).

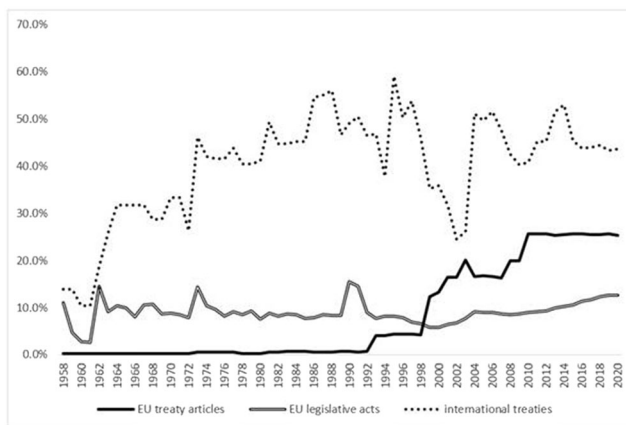
Over the whole period, DI – understood in terms of fully integrated opportunities in differentiated rules – was responsible for a sizeable share of potential integration opportunities: 14.2 per cent in EU primary law (uniform integration: 89.0; differentiation: 3.0), 9.5 per cent in EU secondary law (uniform integration: 88.5; differentiation 2.0) and a remarkable 44.3 per cent in EU-related international law (uniform integration: 35.0; differentiation 20.6). The first indicator remained below 0.7 per cent until 1992, quickly rose to 25.6 per cent in 2011 and ended at 25.4 per cent in 2020. The second indicator started at 11.1 per cent, oscillated around a slightly falling trajectory until 5.8 per cent in 1999 and recovered to 12.7 per cent in 2020. The third indicator started at 13.9 per cent, rose to a peak of 59.0 per cent in 1995 and declined to a final 43.8 per cent in 2020.

Whilst unable to distinguish whether DI is a necessary precondition of further integration or merely accompanies it, the evidence is nevertheless suggestive of a close association between the two phenomena.

Differentiation: Infrequent and Inconsistent

Scholars are instead divided on the relevance and evolution of differentiation, understood in terms of exemptions from a uniform *acquis*. Whilst qualitative surveys emphasize a

Figure 2: Integrated Opportunities in Differentiated Rules, 1958–2020 (Percentage).



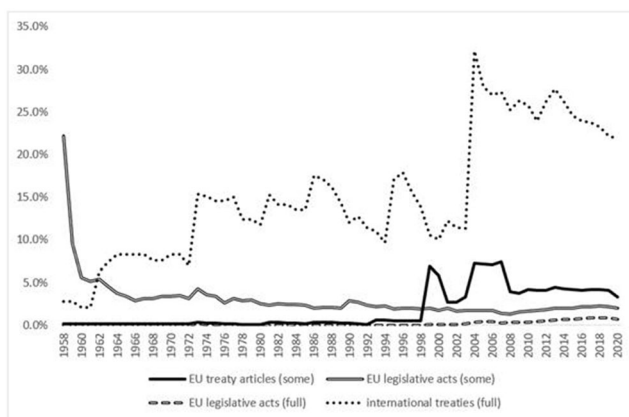
relatively recent explosion of most kinds of differentiation since the 1990s (De Witte et al. 2017), quantitative analyses show a different picture (Schimmelfennig and Winzen 2020a, p. 51, 2020b, p. 5), pointing to large oscillations around a rather constant level in EU primary law (roughly 5 per cent in average) and a mostly declining trend in EU secondary law (roughly 3 per cent, falling until 2008 and slightly recovering afterwards). My calculations markedly reduce these estimates whilst confirming that differentiation has indeed followed inconsistent trends across legal domains and periods (Figure 3).

In EU primary law, differentiation affected 3.0 per cent of integration opportunities over the whole period. It remained extremely low below until 1998 (less than 0.5 per cent), oscillated at high levels between 1999 and 2007 (between 2.7 and 7.4 per cent), stabilized at intermediate levels afterwards (between 3.8 and 4.4 per cent) and fell to 3.3 per cent in 2020. The growth was mainly driven by the foray of European integration in the politically sensitive areas of core state powers (Genschel and Jachtenfuchs 2014), which led to the granting of many permanent or temporary exemptions to old and new member states in areas such as Schengen, Justice and Home Affairs and the Economic and Monetary Union. Compared to previous estimates, the degree of differentiation turns out to be much lower as a whole and experiences a massive and sudden increase around the time of the Treaty of Amsterdam.

In EU secondary law, differentiation affected 2.0 per cent of opportunities over the whole period. Its development did not mirror that of primary law at all, rapidly falling from an initial peak of 22.2 per cent in 1958 to 3.7 per cent in 1964, continuing on a slow and broadly declining path until a trough of 1.3 per cent in 2008, recovering to 2.2 per cent in 2019 and ending with 2.0 per cent in 2020. These patterns were mainly driven by a growing uniformity of established policy areas coupled with a recent increase in legislative activity within more differentiated new areas. The curve is consistent with previous estimates, but at a slightly lower overall level.

In the same domain, additional coding enables for the first time the study of full differentiation, which makes up only 18.4 per cent of differentiated opportunities and is mostly concentrated in the areas of justice and monetary policy. It affected 0.4 per cent of

Figure 3: Differentiated Opportunities, 1958–2020 (Percentage).



integration opportunities over the whole period, following again a very distinctive evolution: completely absent up to 1972 and quite limited up to 2003 (below 0.2 per cent), it rapidly rose to a peak of 0.9 per cent in 2019, before ending at 0.7 per cent in 2020. These patterns were mainly driven by the cascading effects of treaty opt-outs on legislative acts pertaining to core state powers.

In international law, finally, full differentiation affected 20.6 per cent of opportunities over the whole period. The level is much higher than in EU law for two reasons: integration with international law instruments is often purposely pursued whenever an agreement within the EU does not seem feasible, and each EU enlargement mechanically increases the potential for differentiation, as it rarely requires the accession to other international treaties as a precondition. Its trajectory rose in fits and starts from 2.8 per cent in 1958 to 32.2 per cent in 2004, before slowly declining to 21.9 per cent in 2020. These patterns were mainly driven by enlargement, with abrupt spikes after each accession, followed by subsequent slow declines as new members partially caught up with the international obligations shared with their partners.

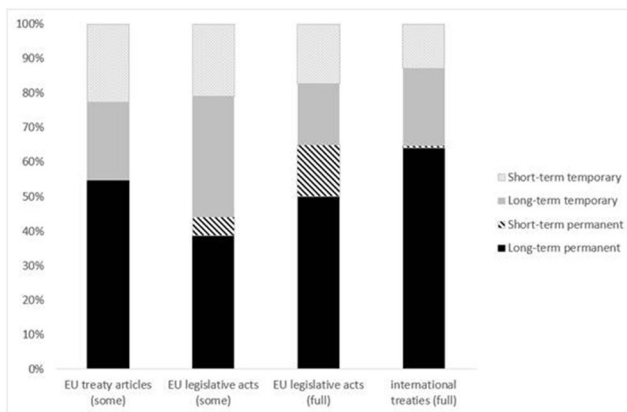
The impact of Brexit in 2020 determined a loss – compared to a counterfactual scenario – of 22.2 per cent of differentiated opportunities in primary law, 11.2 per cent in secondary law, 19.5 per cent in fully differentiated legislative acts and 4.1 per cent in international law.

Altogether, the overall level of differentiation within EU law turns out to be surprisingly low, markedly inferior to previous estimates and to what one might expect of a large, heterogeneous and rapidly integrating international organization.

Temporal Differentiation: Balanced in EU Law, Multi-end in International Law

The most recent survey of temporal differentiation in EU primary law argues that ‘internal differentiation in the EU is predominantly multi-speed’ and quantifies the latter at 64.4 per cent of all differentiations up to 2018 (Schimmelfennig and Winzen 2020a, pp. 52–56). However, by manually coding all differentiated opportunities across the three datasets by their permanence, I reach the opposite conclusion (Figure 4). An opportunity

Figure 4: Differentiated Opportunities by Permanence, 1958–2020 (Percentage).



is counted as temporary if it expired in or before 2020 and as long term if it lasted eight years or more.

Against expectations, permanent differentiation narrowly prevails amongst EU treaty articles (54.8 per cent) and forms a clear majority amongst fully differentiated EU legislative acts (65.0 per cent) and international treaties (64.9 per cent), remaining a minority only amongst differentiated EU legislative acts (44.1 per cent). This is mainly due to the duration of temporary differentiations, which are indeed more frequent but also much shorter, thereby exerting a smaller impact on the total number of differentiated opportunities. Temporarily differentiated opportunities can endure for very long periods, with most of them lasting at least eight years and at least a quarter of them lasting at least 20 years. Finally, Brexit was responsible for the reclassification of a substantial number of differentiated opportunities from permanent to temporary: 18.4 per cent in treaty articles, 4.7 per cent in legislative acts, 13.8 per cent in differentiated legislative acts and 1.9 per cent in international treaties. However, these figures should be interpreted with some caution: many of the ‘permanent’ differentiations are bound to expire over time, and many of the ‘temporary’ differentiations may only be technically so, as the datasets cannot detect the permanence of specific exemptions travelling between distinct legal instruments and domains (e.g. replacement of an old act with a similar one, repatriation of international treaties in EU law).

Altogether, the empirical evidence suggests a relatively balanced distribution of multi-speed and multi-end differentiation in EU law and a clear prevalence of multi-end differentiation in international law. Whilst temporary exemptions contribute to a partial catching up of laggards in specific areas, this effect is counterbalanced by the long duration of many existing exemptions and by the continuous introduction of new ones, lending a strong stickiness to the overall levels of differentiation.

Spatial Differentiation: Increasingly Multi-tier, but with Somewhat Fuzzy and Heterogeneous Tiers

The most recent survey of spatial differentiation in EU primary law stresses its multi-tier character, identifying in 2018 an inverted pyramidal structure encompassing a large core of 18 countries, a smaller semi-periphery of 7 countries and a reclusive periphery of 3 countries (Schimmelfennig and Winzen 2020a, pp. 56–61). My calculations broadly confirm these insights, but with several qualifications.

In a first step, I calculate the country-based differentiation rates for 1958–2020 and 2020 (Table 2). Differentiation affects to some extent every member state: even when it is marginal or entirely absent at the level of EU Treaties, it always becomes noticeable in legislative acts and international treaties. Its degree greatly varies across legal domains: the Gini coefficient for 2020 reaches 72.4 per cent in EU primary law, 38.0 per cent in EU secondary law, 68.5 per cent in fully differentiated legislative acts and 31.7 per cent in international law. The spatial concentration of differentiated opportunities is substantial and strongly increases over time. Finally, countries do not clearly coalesce into well-defined and coherent tiers, often placing themselves along a seamless continuum (particularly in EU secondary law) and trading places from indicator to indicator (e.g. high differentiation of Germany in legislative acts, low differentiation of Denmark and the United Kingdom in international treaties). However, the distance and internal coherence of

Table 2: Differentiated Opportunities by Country (Percentage).

	1958–2020				2020			
	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>
Belgium (1958)	0.1	1.2	0.0	2.6	0.0	0.7	0.0	6.3
France (1958)	0.0	1.9	0.0	2.2	0.0	1.5	0.0	3.1
Germany (1958, 1990)	0.1	2.4	0.0	1.1	0.1	1.6	0.0	6.3
Italy (1958)	0.1	1.6	0.1	10.6	0.0	0.9	0.0	12.5
Luxembourg (1958)	0.1	2.2	0.0	22.5	0.0	0.9	0.1	12.5
Netherlands (1958)	0.1	1.4	0.0	2.8	0.0	1.1	0.1	6.3
Denmark (1973)	3.7	4.3	1.6	14.0	5.8	9.8	5.6	18.8
Ireland (1973)	9.4	2.9	1.1	31.4	19.1	5.9	4.2	25.0
United Kingdom (1973–2019)	11.7	3.8	1.2	11.8	-	-	-	-
Greece (1981)	0.7	1.8	0.0	21.2	0.0	1.0	0.1	21.9
Portugal (1986)	0.1	1.8	0.0	16.4	0.0	1.4	0.1	12.5
Spain (1986)	0.1	2.1	0.0	8.5	0.0	1.8	0.1	3.1
Austria (1995)	0.2	0.9	0.0	19.7	0.1	1.0	0.1	15.6
Finland (1995)	1.4	1.0	0.0	22.1	0.0	1.4	0.1	15.6
Sweden (1995)	3.7	1.6	0.3	22.8	3.0	2.3	0.7	28.1
Cyprus (2004)	10.3	2.6	1.0	46.1	9.4	3.2	1.4	40.6
Czechia (2004)	5.3	1.7	0.5	40.2	3.0	2.0	0.7	34.4
Estonia (2004)	3.6	1.3	0.2	37.3	0.2	1.1	0.2	21.9
Hungary (2004)	5.4	1.4	0.5	37.9	3.1	1.8	0.9	31.3
Latvia (2004)	4.0	1.4	0.2	42.8	0.0	1.2	0.1	31.3

Table 2: (Continued)

	1958–2020				2020			
	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>
Lithuania (2004)	4.2	1.5	0.3	44.5	0.0	1.2	0.2	31.3
Malta (2004)	3.1	1.6	0.4	54.1	0.2	1.8	0.5	40.6
Poland (2004)	8.9	2.0	0.6	34.0	8.4	2.3	0.9	25.0
Slovakia (2004)	3.1	0.7	0.2	32.2	0.0	0.6	0.3	21.9
Slovenia (2004)	2.8	0.9	0.1	33.4	0.0	0.8	0.1	25.0
Bulgaria (2007)	12.7	2.2	0.9	39.1	12.5	2.3	1.0	31.3
Romania (2007)	12.5	2.3	0.9	33.3	12.4	2.5	1.1	21.9
Croatia (2013)	12.6	2.6	1.2	55.1	12.5	2.4	1.2	46.9
<i>EU total</i>	3.0	2.0	0.4	20.6	3.3	2.0	0.7	21.9
<i>Average</i>	4.3	1.9	0.4	26.4	3.3	2.0	0.7	21.9
<i>Gini coefficient of inequality</i>	54.9	22.8	59.4	34.0	72.4	38.0	68.5	31.7

potential groupings of countries markedly increase over time, sketching the contours of fuzzy but nevertheless distinguishable tiers.

In a second step, I identify these tiers and describe their features in 2020 (Table 3). A strongly integrated core, formed by 14 countries (Belgium, France, Germany, Italy, Luxembourg, Netherlands, Greece, Portugal, Spain, Austria, Finland, Estonia, Slovakia and Slovenia), exhibits very little differentiation in EU treaty articles and fully differentiated legislative acts but more variation in partly differentiated legislative acts and international treaties. Crucially, its members tend to systematically participate in all key differentiated ‘clubs’ established under EU law (Economic and Monetary Union, Schengen, PESCO, four enhanced co-operations) and international law (Fiscal Compact, European Stability Mechanism, NATO), with rare exceptions. An intermediate semi-periphery of seven countries (Sweden, Czechia, Hungary, Latvia, Lithuania, Malta and Poland) exhibits a higher level of differentiation and internal variation, approximating the core in certain respects (e.g. EU law) but the periphery in others (e.g. international law). Finally, a less integrated periphery of six countries (Denmark, Ireland, Cyprus, Bulgaria, Romania and Croatia) exhibits extremely high average levels of differentiation in all domains. Periphery and semi-periphery make up less than half of the countries and total opportunities but are responsible for the vast majority of differentiated opportunities: 99.6 per cent in treaty articles, 71.0 per cent in legislative acts, 94.5 per cent in fully differentiated legislative acts and 68.8 per cent in international treaties.

Altogether, the analysis confirms the development of a clear multi-tier pattern of differentiation and a tendential clustering of countries in an inverted pyramidal structure with three relatively recognizable tiers. At the same time, such tiers remain internally quite

Table 3: Differentiated Opportunities by Tier, 2020 (Percentage).

	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>
Composition (number of countries)				
Core	14	14	14	14
Semi-periphery	7	7	7	7
Periphery	6	6	6	6
Differentiation (aggregate rate)				
Core	0.0	1.1	0.1	13.2
Semi-periphery	2.5	1.8	0.6	31.7
Periphery	11.9	4.4	2.4	30.7
Cohesion (standard deviation)				
Core	0.1	0.3	0.1	7.5
Semi-periphery	3.0	0.4	0.3	4.9
Periphery	4.4	3.0	2.0	11.1
Size (share of total opportunities)				
Core	51.9	51.9	51.9	51.9
Semi-periphery	25.9	25.9	25.9	25.9
Periphery	22.2	22.2	22.2	22.2
Impact (share of differentiated opportunities)				
Core	0.4	29.0	5.5	31.2
Semi-periphery	19.8	23.1	20.8	37.6
Periphery	79.8	47.9	73.7	31.2

Table 4: Differentiated Opportunities by Policy Area (Percentage).

	1958–2020				2020			
	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>
Institutions	0.0	3.0	0.0	-	0.0	1.0	0.0	-
Market	0.7	1.6	0.0	26.8	0.9	1.1	0.1	20.8
Agriculture	1.0	2.3	0.0	-	0.0	1.8	0.0	-
Health and consumer protection	0.0	1.4	0.0	-	0.0	1.5	0.0	-
Social policy	0.2	1.1	0.1	-	0.0	1.2	0.1	-
Environment and energy	0.0	1.3	0.1	16.1	0.0	2.3	0.2	16.0
Transport	0.0	1.0	0.1	22.5	0.0	0.9	0.4	28.4
Foreign and security policy	0.6	0.0	0.0	46.0	0.7	0.1	0.0	51.9
Justice and interior	14.7	5.2	3.7	9.2	9.2	5.1	3.6	7.8
Monetary and fiscal policy	7.8	10.6	5.4	24.3	8.5	10.7	6.6	21.0
N.A.	-	0.0	0.0	-	-	0.0	0.0	-
<i>EU total</i>	3.0	2.0	0.4	20.6	3.3	2.0	0.7	21.9
<i>Average</i>	2.5	2.5	0.9	24.2	1.9	2.3	1.0	24.3
<i>Gini coefficient of inequality</i>	72.5	54.4	81.3	32.2	71.9	56.6	81.0	33.5

heterogeneous, as each peripheral and semi-peripheral country diverges from the uniform *acquis* in highly specific ways (to a different extent, on different legal domains, policy areas and individual acts and rules, at different times and for different reasons) and the clustering does not neatly follow any of the main cleavages of European integration (e. g. large vs. small, rich vs. poor, old vs. new, left vs. right, Western vs. Eastern, euro vs. non-euro, Atlanticist vs. Europeanist).

Policy Differentiation: Strong Variations across Legal Domains

The most recent survey of policy differentiation in EU primary law deems multi-menu differentiation of secondary importance (Schimmelfennig and Winzen 2020a, pp. 61–65). This conclusion is based on the fact that permanent differentiations seem to be concentrated in the few areas affecting core state powers, leaving most other domains either uniformly integrated from the outset or rapidly becoming so after post-accession transitional periods. My calculations only partly confirm the generalizability of this insight.

In a first step, I calculate the policy-based differentiation rates for 1958–2020 and 2020 (Table 4). Spatial differentiation in EU law is indeed extremely concentrated in a limited number of policy areas: justice and interior affairs and monetary and fiscal policy. The area of foreign and security policy appears to be extremely differentiated in international law but almost entirely uniform in EU law: this is due to the fact that the highly differentiated activities taking place in the field of common foreign and security policy (Keukeleire and Delreux 2022) rarely take the form of binding legislative acts and are therefore largely excluded from the datasets. Finally, other policy areas tend to exhibit extremely low and falling levels of differentiation in EU primary law but substantial ones in EU secondary law and especially in international law, where many highly selective

Table 5: Differentiated Opportunities by Policy Group, 2020 (Percentage).

	<i>EU treaty articles (some)</i>	<i>EU legislative acts (some)</i>	<i>EU legislative acts (full)</i>	<i>International treaties (full)</i>
Composition (number of policy areas)				
Other areas	8	8	8	8
Core state powers	3	3	3	3
Differentiation (aggregate rate)				
Other areas	0.1	1.3	0.1	21.4
Core state powers	8.3	5.1	3.4	22.2
Cohesion (standard deviation)				
Other areas	0.3	0.7	0.2	11.7
Core state powers	4.7	5.3	3.3	22.6
Size (share of total opportunities)				
Other areas	60.7	81.9	81.9	43.8
Core state powers	39.3	18.1	18.1	56.3
Impact (share of differentiated opportunities)				
Other areas	2.2	54.6	14.2	42.9
Core state powers	97.8	45.4	85.8	57.1

EU-related treaties and organizations exist in fields such as research, transport and environment (e.g. ESO, Eurovignette, ECMWF).

In a second step, I identify two broad policy domains and describe their features in 2020 (Table 5). The domain of core state powers represents a small minority of policy areas (three out of 11) and a variable share of total opportunities (39.3 per cent in EU primary law, 18.1 per cent in EU secondary law, 56.3 per cent in international law) but is responsible for almost the entirety of differentiated opportunities in EU treaty articles (97.8 per cent) and the vast majority of fully differentiated opportunities in EU legislative acts (85.8 per cent). At the same time, it is much less dominant amongst somewhat differentiated legislative acts (45.4 per cent) and international treaties (57.1 per cent), where other policy areas account for substantial shares of the total.

Altogether, policy differentiation follows an overwhelmingly single-menu pattern in EU primary law, where states are reluctant to accommodate special needs outside of the controversial domain of core state powers. A similar but more attenuated pattern is visible in EU secondary law, as full differentiations tend to be granted only in a limited number of areas (mostly where treaty opt-outs are present) but partial differentiations are more broadly spread. International law, instead, is characterized by a strongly multi-menu pattern, as states fail to join in a wide range of policy areas in response to their specific conditions and preferences.

III. Discussion: Impressive but Slowing Integration, Reluctant and Eclectic Differentiation

The most interesting findings of the empirical analysis can be summarized under three overarching headings.

Firstly, the methods and data employed allow for the first time a precise quantification of the extent of *legal integration* amongst EU member states. The evidence shows an overall path of impressive but slowing growth. The sheer number of integrated opportunities mushroomed over time, driven by both deepening and widening processes, and constantly represented the overwhelming majority of potential integration opportunities. This growth occurred across legal domains (EU primary law, EU secondary law, EU-related international law), although with different intensities and paces. However, the upward movement seems to have roughly plateaued since 2014: major treaty revisions ceased to be pursued, enlargement stalled, legislative activity was mostly confined to the amendment of existing acts, Brexit occurred, and only integration under international law continued to increase. This conclusion must be qualified in two respects. On the one hand, the quantitative stagnation of legal integration has been accompanied by important advances in the qualitative content of legislative and executive EU activity, particularly in the fields of EMU and expenditure policies. On the other hand, ongoing efforts towards increased territorial uniformity, treaty reform and external enlargement, if successful, may turn this period into a lull rather than an end of legal integration.

Secondly, differentiation in the EU is shown to be clearly *reluctant*, being granted only rarely and in a highly constrained manner. On the one hand, whilst norms containing differentiations represent a minority but substantial share of the total, differentiated opportunities are remarkably rare within the EU legal order (3.0 per cent in primary law, 2.0 per cent in secondary law), becoming significant only outside of it (20.6 per cent in

international law). On the other hand, a host of features exist to constrain their prevalence and impact. Differentiated opportunities are overwhelmingly partial, providing selective exemptions from specific norms but generally avoiding complete opt-outs from entire EU Treaties (0 per cent) or legislative acts (0.4 per cent). They are often temporary, particularly in secondary law (55.9 per cent) but less in primary law (45.2 per cent). They tend to be concentrated and endure over time only in a minority of member states (United Kingdom, Denmark, Ireland, Cyprus, Bulgaria, Romania and Croatia), although all countries are affected to some degree. They are disproportionately present in areas affecting core state powers, very clearly in primary law (97.8 per cent) but less in secondary law (45.4 per cent). In addition, several features that cannot be fully quantified with the existing datasets should also be mentioned: the tendency of countries with wholesale treaty opt-outs to selectively reintegrate at the level of implementing secondary law (Migliorati 2022); the overwhelmingly unidirectional character of differentiation, which normally foresees exemptions from new, more ambitious norms and only exceptionally leads to a lower level of integration; the limited differentiation of the EU at the institutional level, as only certain differentiated regimes involve some, usually partial, form of exclusion of non-members from full participation in institutions and decision-making mechanisms; and the tendency of the EU to absorb, homogenize and subordinate alternative regional integration frameworks, thereby reducing their impact on differentiation arising from international law instruments. Such reluctance is somewhat surprising, as it is at odds with both some expectations of the theoretical literature (Schimmelfennig and Winzen 2020a) and the apparent practice amongst other international organizations. It has tightly constrained the potential variation of shared norms across EU member states, despite their increasing number, heterogeneity and degree of integration, and has contributed to steering the European integration process towards overall uniformity and away from alternative visions of a multi-menu *Europe à la carte* (Dahrendorf 1979; Majone 2014) or of a multi-tier Europe of concentric circles (Fabbrini 2019; Schäuble and Lamers 1994). This finding suggests two promising avenues for further research. On the one hand, similar coding efforts for other European, regional and global international organizations could confirm whether this reluctance is indeed an exceptional feature of the EU, reflecting its *sui generis* character. On the other hand, more quantitative and qualitative studies are needed to disentangle the main causal drivers (demand and supply factors) and mechanisms leading to this outcome.

Thirdly, differentiation amongst EU member states is shown to be *eclectic*, with inconsistent trends across legal domains, periods, countries and policy areas and each country diverging from the uniform *acquis* to a different extent, in different ways and for different reasons. This conclusion generalizes the results of much of the existing literature (Duttle et al. 2017; Schimmelfennig and Winzen 2020a), shedding new light on the difference between EU and international law instruments, partial and complete differentiation and its uneven use by individual countries. Moreover, the evidence suggests the existence of at least two additional logics beyond those already identified as instrumental, constitutional and discriminatory differentiation (Schimmelfennig and Winzen 2014; Schneider 2009): an ordinary functionalist differentiation aimed at optimizing overall benefits whenever uniform solutions are not fully appropriate (particularly common in secondary EU law) and a mechanical differentiation deriving from the repercussions of EU enlargement on EU-related international law, which tends to inertially endure in treaties of limited import

and smaller countries. This finding has major implications for research on differentiation, highlighting the importance of considering multiple and contingent factors and the limits of simple nomothetic explanations. It also points to the need for further research on the drivers of differentiation in specific contexts, particularly on the role played by the design features of each legal instrument, by the decision-making procedures determining its enactment and by the specific dynamics of each bargaining process.

Beyond its scientific interest, this systematic quantification of the prevalence and patterns of legal integration and differentiation may also contribute to the ongoing normative debate on the usefulness of DI as a tool to advance integration whilst accommodating vital national preferences (Chiochetti 2021). In particular, the clear evidence of a reluctant use in past and existing EU law should allay overexaggerated fears of a corrosive impact of differentiation on European unity and solidarity but also warn about the structural limits to its expansion and the low feasibility of its more ambitious variants.

Conclusions

This article has provided an innovative quantitative analysis of the empirical patterns of legal integration and differentiation in the EU from 1958 to 2020 using the evidence from new or revised datasets: EUDIFF1rev on EU primary law, EUDIFF2rev on EU secondary law and EUDIFF3 on EU-related international law. A number of methodological advances have allowed a more accurate and comprehensive measurement of various phenomena, partly confirming and partly challenging the received wisdom of the previous literature.

The analysis has yielded the following key descriptive findings. First, it shows an impressive but slowing growth of integration across all legal domains whilst distinguishing between an initial period of consolidation amongst the EEC founding members (1958–1972), an intermediate period of rapid integration marked by enlargement (1973–2013) and a final period of stagnation (2014–2020). Second, it confirms that DI is a relatively common phenomenon, responsible for a substantial minority of potential opportunities in EU primary (14.2 per cent) and secondary law (9.5 per cent) and a plurality of them in EU-related international law (44.3 per cent). Third, it reveals that differentiation is unexpectedly infrequent and predictably inconsistent, representing a small minority of potential opportunities in EU primary (3.0 per cent), EU secondary (2.0 per cent) and international (20.6 per cent) law and following contradictory trends across legal domains, periods, countries and policy areas. Fourth, it challenges previous findings on temporal differentiation, showing that permanent, multi-end differentiation is responsible for roughly half of all differentiated opportunities in EU primary (54.8 per cent) and secondary (44.1 per cent) law and clearly prevails in international law (64.9 per cent). Fifth, it confirms that spatial differentiation has assumed over time an increasingly concentrated, multi-tier character, although the three tiers (core, periphery and semi-periphery) have fuzzy boundaries and a low internal cohesion. Sixth, it demonstrates that policy differentiation widely varies across legal domains, with a strong concentration in the areas affecting core state powers in EU primary law (single-menu character), a weaker concentration in EU secondary law (mixed character) and a wide dispersion across all available policy areas in international law (multi-menu character). Finally, it depicts a small impact of Brexit in terms of integration but a more substantial one in terms of differentiation; it

remains to be seen how this will impact on future attitudes towards uniformity. More broadly, the analysis reveals that legal differentiation in the EU is reluctant and eclectic: relatively rare, subjected to many constraints and marked by inconsistent patterns across legal domains, periods, countries and policy areas.

Altogether, the present article confirms the fruitfulness of the quantitative approach to the study of international integration and differentiation, pointing to four promising avenues of future research. Firstly, the three datasets are openly available for further analysis and manipulation (e.g. population-weighted figures) and can be periodically updated to take into account of new developments. Secondly, the same methodology could be fruitfully applied to the analysis of other areas of EU law (e.g. case law of the Court of Justice, flexible implementation, executive discretion, ‘soft law’ instruments) as well as to the comparative analysis of other regional and international organizations. Thirdly, the empirical findings highlight the existence of multiple and highly contingent causal factors, mechanisms and logics behind differentiation, suggesting the need for finer-grained explanations informed by quantitative and qualitative evidence. Fourthly, the results achieved in the study of formal legal norms confirm that this approach cannot capture the whole complexity of European and international integration processes, providing renewed impetus to interdisciplinary research programmes aiming to understand the connections and interplay between their formal and informal, normative and practical as well as institutional and transactional dimensions.

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References

- Bellamy, R., Kröger, S. and Lorimer, M. (2022) *Flexible Europe: Differentiated Integration, Fairness, and Democracy* (Bristol: Bristol University Press).
- Börzel, T.A. (2005) ‘Mind the Gap! European Integration between Level and Scope’. *Journal of European Public Policy*, Vol. 12, No. 2, pp. 217–236.
- Börzel, T.A. (2021) *Why Noncompliance* (Ithaca, NY: Cornell University Press).
- Checkel, J.T. and Katzenstein, P.J. (2009) *European Identity* (Cambridge: Cambridge University Press).
- Chiochetti, P. (2021). ‘Design principles for efficient and legitimate differentiated integration schemes’, EUI RSCAS Working Papers, No. 66.
- Chiochetti, P. (2023). ‘Datasets on legal integration and differentiation in the EU (1958-2020)’. <http://hdl.handle.net/1814/75313>

- Dahrendorf, R. (1979) *A Third Europe?* (Florence: European University Institute).
- De Witte, B., Ott, A. and Vos, E. (eds) (2017) *Between Flexibility and Disintegration: The Trajectory of Differentiation in EU Law* (Cheltenham: Edward Elgar).
- Duttle, T. (2016) *Differentiated Integration at the EU Member State Level* (Baden-Baden: Nomos).
- Duttle, T., Holzinger, K., Malang, T., Schäubli, T., Schimmelfennig, F. and Winzen, T. (2017) 'Opting Out from European Union Legislation: The Differentiation of Secondary Law'. *Journal of European Public Policy*, Vol. 24, No. 3, pp. 406–428.
- Eppler, A., Anders, L.H. and Tuntschew, T. (2016) *Europe's Political, Social, and Economic (Dis-) Integration: Revisiting the Elephant in Times of Crises* (Vienna: IHS).
- Fabbrini, S. (2019) *Europe's Future: Decoupling and Reforming* (Cambridge: Cambridge University Press).
- Genschel, P. and Jachtenfuchs, M. (2014) *Beyond the Regulatory Polity?: The European Integration of Core State Powers* (Oxford: Oxford University Press).
- Gilbert, M. (2021) *European Integration: A Political History* (London: Rowman & Littlefield).
- Holzinger, K. and Schimmelfennig, F. (2012) 'Differentiated Integration in the European Union: Many Concepts, Sparse Theory, Few Data'. *Journal of European Public Policy*, Vol. 19, No. 2, pp. 292–305.
- Keukeleire, S. and Delreux, T. (2022) *The Foreign Policy of the European Union* (2nd edition) (London: Macmillan).
- Laffan, B. and Lindner, J. (2020) 'The Budget: Who Gets What, When, and How?' In Wallace, H., Pollack, M.A., Roederer-Rynning, C. and Young, A.R. (eds) *Policy-making in the European Union* (8th edition) (Oxford: Oxford University Press), pp. 208–232.
- Leruth, B., Gänzle, S. and Trondal, J. (2022) *The Routledge Handbook of Differentiation in the European Union* (Abingdon: Routledge).
- Leuffen, D., Rittberger, B. and Schimmelfennig, F. (2022) *Integration and Differentiation in the European Union: Theory and Policies* (Cham: Palgrave Macmillan).
- Lindberg, L.N. (1970) 'Political Integration as a Multidimensional Phenomenon Requiring Multivariate Measurement'. *International Organization*, Vol. 24, No. 4, pp. 648–731.
- Majone, G. (2014) *Rethinking the Union of Europe Post-Crisis: Has Integration Gone Too Far?* (Cambridge: Cambridge University Press).
- Migliorati, M. (2022) 'Postfunctional Differentiation, Functional Reintegration: The Danish Case in Justice and Home Affairs'. *Journal of European Public Policy*, Vol. 29, No. 7, pp. 1112–1134.
- Molle, W. (2006) *The Economics of European Integration: Theory, Practice, Policy* (Farnham: Ashgate).
- Nye, J.S. (1968) 'Comparative Regional Integration: Concept and Measurement'. *International Organization*, Vol. 22, No. 4, pp. 855–880.
- Schäuble, W. and Lamers, K. (1994) *Überlegungen Zur Europäischen Politik* (Bonn: CDU/CSU in Bundestag).
- Schimmelfennig, F., Leuffen, D. and Rittberger, B. (2015) 'The European Union as a System of Differentiated Integration: Interdependence, Politicization and Differentiation'. *Journal of European Public Policy*, Vol. 22, No. 6, pp. 764–782.
- Schimmelfennig, F. and Winzen, T. (2014) 'Instrumental and Constitutional Differentiation in the European Union'. *Journal of Common Market Studies*, Vol. 52, No. 2, pp. 354–370.
- Schimmelfennig, F. and Winzen, T. (2020a) *Ever Looser Union? Differentiated European Integration* (Oxford: Oxford University Press).
- Schimmelfennig, F. and Winzen, T. (2020b) 'Differentiated EU integration: Maps and modes'. EUI RSCAS Working Papers, No. 24.
- Schimmelfennig, F. and Winzen, T. (2022a) 'EUDIFF1 – Differentiated integration in EU treaties'. <https://doi.org/10.3929/ethz-b-000538188>

- Schimmelfennig, F. and Winzen, T. (2022b) 'EUDIFF2 – Differentiated integration in EU legislation'. <https://doi.org/10.3929/ethz-b-000538562>
- Schneider, C.J. (2009) *Conflict, Negotiation and European Union Enlargement* (Cambridge: Cambridge University Press).
- Sielmann, C.M. (2020) *Governing Difference: Internal and External Differentiation in European Union Law* (Baden-Baden: Nomos).
- Stubb, A.C.-G. (1996) 'A Categorization of Differentiated Integration'. *JCMS: Journal of Common Market Studies*, Vol. 34, No. 2, pp. 283–295.
- Telle, S., de Blok, L., de Vries, C.E. and Cicchi, L. (2022) 'Elite-Mass Linkages in the Preference Formation on Differentiated Integration'. *JCMS: Journal of Common Market Studies*, Vol. 60, No. 6, pp. 1663–1683.
- Wessels, W. (1997) 'An Ever Closer Fusion? A Dynamic Macropolitical View on Integration Processes'. *JCMS: Journal of Common Market Studies*, Vol. 35, No. 2, pp. 267–299.
- Zbiral, R., Princen, S., and Smekal, H. (2022). 'Differentiation through flexibility in implementation: Strategic and substantive uses of discretion in EU directives'. *European Union Politics*, Vol. 24, No. 1, pp. 102–120.