Resale price maintenance in consumer good markets:

an economic justification for the prohibition of RPM

Melanie Ariane Schwaderer

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

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European University Institute
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The thesis contributes to the debate on the EU's approach to the business practice of resale price maintenance (RPM), which is widely criticized as too strict and in conflict with what is considered to be the consensus in the economic literature.

The thesis critically dissects the economic consensus, on which the critique against the EU's approach is based, by analyzing the empirical evidence that is cited to support the claim that RPM can frequently be explained by the service-based RPM models and shows that there is no convincing evidence that would support the significance of these positive RPM models that predict positive effects on welfare. To support this finding the thesis collects new evidence by surveying the marketing literature and shows that not only is there no convincing evidence that the positive RPM models frequently apply, but to the contrary there is evidence that these models are inconsistent with the real world phenomenon of RPM.

Having refuted the service-based models the thesis takes up the scientific challenge that "it takes a theory to beat a theory" and proposes to fill the gap with three price-based models. The thesis offers an analysis of the three price-based RPM models, first from the perspective of welfare effects and then from a broader economic perspective in an attempt to ultimately show that the EU approach to RPM can be justified based on these economic models. All three models explain the situation in which RPM is used by a branded good manufacturer to create the perception of high quality, which is used either as a credible quality signal, becomes a component of the product or is used to bias the consumer decision; they thus enter the difficult terrain of consumer preference formation and of markets for the intangible components of a product.

Inhalt

LIST OF ABBREVIATIONS

CFI	Court of First Instance
ECJ	European Court of Justice
EU	European Union
FTC	Federal Trade Commission
OECD	Organisation for Economic Co-operation and Development
para.	Paragraph
Reg.	Regulation
RPM	Fixed and minimum resale price maintenance
SD	Selective distribution
TFEU	Treaty on the functioning of the European Union
VGL	Vertical Guidelines

Chapter 1: INTRODUCTION

The thesis looks at resale price maintenance in consumer good markets aiming to answer the question of whether the current prohibition of RPM under EU law is justified from an economic point of view. Addressing the broad consensus that the EU's approach to RPM is at odds with economics, it explores the divergence between the EU position and what can be considered the 'economic consensus' with regard to the economic evaluation of RPM that led the US Supreme Court in *Leegin* to abandon its strict per se prohibition of RPM.

The introduction defines RPM as the research subject (section I), examines the controversy to define the main area of conflict (section II) and then proposes how to address this area of conflict (section III).

I. Research subject: RPM in consumer good markets

The thesis looks at resale price maintenance in consumer good markets.

Resale price maintenance (RPM) or vertical price-fixing refers to the practice by which a manufacturer or supplier directly sets a minimum or fixed retail price for which the downstream retailer or dealer can sell the goods. In both cases, the setting of a minimum and of a fixed price, dealers cannot price below the price level set by the manufacturer. A manufacturer may also set a maximum price, above which dealers may not sell the goods. The practice of maximum RPM is not subject of this thesis, which focuses exclusively on the setting of minimum or fixed prices. If not further specified, the term RPM is used to refer to both practices (fixed and minimum).

RPM is concluded between a manufacturer and a retailer and concerns the distribution of the contracted good, i.e. the process of getting the finished product to the market and its customers[1]. As manufacturer and retailer operate on different levels of the vertical production and distribution chain, RPM is in the European Commission's terminology considered a 'vertical agreement' as opposed to a 'horizontal agreement' concluded between competitors, i.e. undertakings on the same level of the vertical chain.[2] When a 'vertical agreement' falls within the scope of Art. 101 (1) TFEU it is also referred to as 'vertical restraint'[3].

[1] Similar Korah and O'Sullivan (2002: 1).
[2] 'Vertical agreement' is defined in Art. 2 (1) Commission Regulation 2790/1999.
[3] 'Vertical restraint' is defined in Art. 2 (2) Commission Regulation 2790/1999.

The thesis looks at RPM concerning consumer goods, which are final (as opposed to intermediate) goods, ready for consumption, which are sold to the end consumer.[4] RPM is used here to determine the price of the final good that the consumer can be charged by the dealer. Consumer goods can be, and very often are, referred to as 'branded' goods.[5] While there is no common understanding of the term 'brand', it loosely refers to the understanding of and feeling for a product, which rests in the minds and emotions of the consumer, may arise from a wide range of sources – some under the control of the producer, some not[6] – and on which basis products are differentiated.[7] 'Brand' has in particular a broader meaning than the term 'trademark', which serves as the legal foundation of the brand.[8] Creating and managing the brand is an integral part of the manufacturer's marketing strategy for the product.[9]

RPM is often used (or at least desired) by suppliers that use 'selective distribution systems' for the marketing of their goods; 'selective distribution systems' are distribution systems "where the supplier undertakes to sell the contract goods …, either directly or indirectly, only to distributors selected on the basis of specified criteria and where these distributors undertake not to sell such goods or services to unauthorised distributors within the territory reserved by the supplier to operate that system"[10].

RPM eliminates price competition between the distributors of the product of a particular manufacturer or a particular brand; it directly restricts what is considered in antitrust terminology "*intra*brand competition"; in contrast "*inter*brand competition" refers to the competition between different producers or brands of the same type of product.[11] RPM restricts the *price* dimension of intrabrand competition, RPM is thus often referred to as "price restraint"

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[4] In contrast Regulation 2790/1999 and the Commission's Vertical Guidelines cover vertical agreements relating to both intermediate and final goods, cf. Commission, Vertical Guidelines 2010, para. 2 and 25(d).

[5] Similar the Commission finding that "[t]he distinction between branded and non-branded goods … will often coincide with the distinction between intermediate goods … and final goods" (Commission, Vertical Guidelines 2010, para. 104).

[6] For this consumer-centric definition of "brand" see Appleton and Noble (2015: 49).
From the perspective of the manufacturer the brand is a "reputational asset" (see e.g. Urwin et al. (2008: 5)).

[7] Gundlach and Philips (2015: 125).

[8] Mittelstaedt (2015: 203); Griffiths (2015: 238).
The trademark is a legally-protected "sign used within economic activities by a producer … to identify a particular product …; it is a 'distinctive sign' that enables offerings of goods … to be – more or less- differentiated, and consequently enables consumers to distinguish between different goods and recognize their provenance" (Ramello (2006: 548)).
A trademark, "which through promotion and use has acquired significance over and above its functional rule of distinguishing the goods … concerned" turns into a brand (Blackett (1998: 8), which is "used to indicate far more than source and/or quality" (Desai and Waller (2015: 75)).

[9] Gundlach and Philips (2015: 125).

[10] Reg. 220/2010, Art. 1(e).

[11] Jones (2008: 905); Van den Bergh (2016: 167).
Sometimes the terms 'intertype' versus 'intratype' competition are used instead, see e.g. Kuenzler (2017: 86).

as opposed to "nonprice restraints", which are vertical restraints that restrict other dimensions of intrabrand competition.

For the purposes of the thesis, it is assumed that RPM is concluded by *agreement.* A manufacturer may reach the same (or at least similar) result of getting its dealers to not price below a particular price by unilateral measures, such as by recommending prices, possibly combined with incentives and threats. The thesis does not consider the difficult question of how to determine the boundary between *agreements*, which are covered by Art. 101 (1) TFEU, and *purely unilateral measures*, which are not. While this is a question for which also the economics of RPM should play a role, the current legal framework, in which the 'agreement' requirement is assessed independently from the other requirements of Art. 101 (1) TFEU and is interpreted mainly from a contract law perspective, the exact role of the 'agreement' requirement in view of the economic purpose of Art. 101 TFEU is unclear.[12] This is not problematic in case of horizontal agreements, as here the parties to the agreement share the common economic purpose of restricting competition, but in case of vertical agreements such as RPM there is a conceptual mismatch, as the parties to the contractual 'agreement' follow diverging economic interests.[13] How the 'agreement' requirement could be connected to the economic purpose of Art. 101 (1) TFEU in vertical cases would be a research topic of its own.[14] The focus of analysis is thus put exclusively on the result reached, namely the elimination of intrabrand competition among dealers; the means by which it is implemented is not analyzed, an agreement in the sense of Art. 101 (1) TFEU is assumed to exist.

RPM may be concluded between an individual manufacturer and its retailers; alternatively several suppliers or their trade association may collectively agree to use and enforce RPM in their respective distribution agreements. While several collective RPM schemes have been the target of Commission activity in the 1970s and 1980s,[15] more recently collective RPM has

[12] Cf. Lianos (2008: 1066) who argues that the agreement requirement in vertical cases "needs to be treated less like the contract law idea of an "agreement" and more in keeping with economics and the objectives of competition policy itself".
[13] Cf. Lianos (2008: 1032f.).
[14] This question is addressed by Lianos (2008), though he follows a different view on the economics of RPM and vertical restraints in general than proposed in this thesis.
[15] See e.g. Commission decision 30.6.1970, OJ [1970] L 148/9 – *ASPA*; Commission decision 16.12.1971, OJ [1972] L 13/34 - *Vereeniging van Cementhandelaren*; Commission decision 3.6.1975, OJ [1975] L 159/22 - *Stoves and Heaters*; Commission decision 2.12.1977, OJ [1978] L 20/18 - *Central Bureau voor de Riwielhandel*; Commission decision 25.11.1981, OJ [1982] L 54/36 - *VBBB/VBVB*; Commission decision 12.12.1988, OJ [1989] L 22/12 – *Publishers Association*.
See also ECJ 29.10.1980, C-209/08, ECLI:EU:C:1980:248 – *FEDETAB*; CFI 9.7.1992, T-66/89, ECLI:EU:T:1992:84 – *Publishers Association*; ECJ 17.1.1995, C-360/92 P, ECLI:EU:C:1995:6 – *Publishers Association*.

featured neither in legal activity nor debate. The thesis examines only individual RPM and excludes collective RPM schemes from the analysis.

A further distinction, which is often drawn with regard to RPM, is that RPM can be either *supplier*- or *dealer*-initiated. Though not excluding dealer-initiated RPM from the analysis, the main focus of the thesis will fall on supplier-initiated RPM, i.e. the cases in which the restriction of the horizontal competition among dealers is vertically-implemented on the initiative of the supplier. This area of RPM is particularly controversial due to the important difference between restrictions of *inter*- and *intra*brand in the cases, in which the restriction of *intra*brand competition is vertically-implemented on the initiative of the supplier. In case of horizontal agreements that restrict *inter*brand price competition the cartelists directly benefit from the elimination of competition among them. In the case of *intra*brand price competition, where the restriction of the horizontal competition among dealers is vertically implemented on the initiative of the supplier, the supplier does not directly benefit from the restriction of competition, as the elimination of intrabrand price competition comes at a high cost for the supplier.[16] This is why it is often assumed that the reason for why the supplier is willing to incur the cost of RPM must be a pro-competitive one, namely the strengthening of its position in the competition in relation to the other suppliers of the same type of product through optimizing the vertical relationship.

II. The RPM debate on the EU's strict approach to RPM

A. The main view: the EU approach is at odds with economics

RPM is examined in EU law under Art. 101 TFEU, which prohibits agreements that restrict competition within the internal market (Art. 101 (1) TFEU) and provides for an exemption from this prohibition under certain conditions (Art. 101 (3) TFEU). How Art. 101 TFEU is applied to RPM by European and national courts and competition agencies has for long been the focus of debate and the target of fierce criticism. There is a very strong consensus in the literature that the EU's approach to RPM is too strict, in particular in terms of how the burdens of proof are

[16] On the cost of RPM see below chapter 3 III.B. On the difference between the elimination of interbrand and intrabrand competition see below chapter 3 III.C.

allocated. The literature is full of proposals for modifications that would result in a more relaxed stance towards RPM.[17]

Some argue that RPM should not be classified as 'object restriction' under Art. 101 (1) TFEU unless a "theory of harm" is shown by the plaintiff.[18] Others posit that defendants should be able to claim already under Art. 101 (1) TFEU the plausible efficiencies of RPM[19] or propose that RPM should be able to escape the finding of an 'object restriction' through the notion of commercial ancilliarity in general[20] and in particular in the case of "trademarked" goods, if the restriction is necessary for this specific type of distribution.[21] Others argue that RPM should be able to benefit from a safe harbor based on market shares,[22] in particular under the De minimis doctrine under Art. 101 (1) TFEU[23] or through being able to benefit from a group exemption under Art. 101 (3) TFEU.[24] The common aim of these proposals is to align the EU's approach to what is considered to be a broad consensus in the economic literature according to which RPM is detrimental to economic welfare only in a very limited number of situations; the common denominator of all criticisms is the critique that the EU's current approach is inconsistent with this 'economic consensus' and thus lacks an economic rationale.[25]

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[17] For proposals to change the automatic object restriction finding under Art. 101 (1) see e.g. Möschel (2010: 1236) (exemption for branded goods); Reindl (2010: 1324); Mahtani (2012); Ioannidou and Nowag (2012).
For the proposal to make a De minimis safe harbour available to RPM see for example Kyprianides (2012: 385); Verras (2009: 40); Kasten (2007: 1007).
For the proposal to remove RPM from the list of hard-core restrictions see e.g. Vickers (2007: 10); Font-Galarza *et al.* (2013: 2).

[18] Reindl (2010: 1324) for example wants to establish an analytical structured framework under Art. 101 (1) TFEU under which the plaintiff must show based on factors like (absence of) market power, industry prone to collusion, frequency of RPM in a given industry, source of the restraints (supplier/retailer) that negative effects are possible.

[19] Ibanez-Colomo (2012: 553) and Ibanez-Colomo and Lamadrid (2016:30-31) argue that RPM is an outlier to what they consider to be the EU's default methodology of considering plausible efficiencies already under Art. 101 (1) TFEU, which cannot be explained from an economic perspective. On this see below chapter 5 …

[20] Font-Galarza (2013: 3).

[21] Möschel (2010: 1236) arguing that any vertical restraint connected to the distribution of "trademarked" goods should be exempted already under Art. 101 (1) TFEU, if necessary for this type of distribution (he refers to the "Markenartikelvertrieb").

[22] Kasten (2007: 1007).

[23] Kyprianides (2012: 385) and Verras (2009: 40) propose to remove RPM from the Commission's De minimis notice (this was before Expedia). Similar Hofmann (2013: 727, 730).

[24] For the proposal to remove RPM from the list of hard-core restrictions see e.g. Vickers (2007: 10); Font-Galarza et al. (2013: 2). See also Botteman and Kuilwijk (2010:9); Ahlert (2012: 217).
Similar Motta et al. (2009) proposing the following conrete formulation of the BER: "(1) the de minimis rule applies also for RPM (i.e., a firm with less than 15% market share can engage in RPM); (2) for a firm with a share above 15%, the burden of proving that RPM will have beneficial effects on competition is resting upon it; (3) it is unlikely that a firm with a share in excess of 30% will be able to show that RPM will have a net beneficial effect".

[25] See e.g. Reindl (2010: 1303) finding that "[t]here is little doubt that the [EU's approach is] not aligned with the economic goals of [EU] competition law", adding that "[t]his in itself should be an uncontroversial conclusion that does not require further discussion".
See also Ibanez-Colomo and Lamadrid (2016: 30-31) (explaining the ECJ's approach to RPM as an "outlier" that does not fit its economics-based interpretation of Art. 101 (1) in other cases). Similar Ibanez-Colomo (2012: 553, 561).

B. The target of the critique: the EU's strict approach

The critique targets the legal assessment of RPM under Art. 101 TFEU, in particular the following steps in the interpretation of Art. 101 TFEU that make the EU's approach so strict.

1. The automatic classification of RPM as 'object restriction'

Art. 101 (1) TFEU prohibits agreements between undertakings, which may affect trade between Member States and which have as their object or effect the restriction of competition within the internal market. Crucial in the current interpretation of Art. 101 TFEU is that RPM is automatically found to be a restriction of competition by object ('object restriction'), without considering the economic context in the individual case, thus denying it the possibility to escape the 'object restriction' finding through the commercial ancilliarity doctrine, which non-price vertical restraints may benefit from. This position was developed early on in the jurisprudence of the ECJ, in particular in *Binon*[26], complemented by the ECJ's jurisprudence on selective distribution restraints, in which context the ECJ draws the difference between vertical price restraints, which *cannot*, and nonprice vertical restraints, which *can* be justified as objectively necessary for the organization of selective distribution.[27]

Also the newer ECJ cases of *CEPSA* and *Pedro IV Servicios*, which touch upon RPM in passing, have not changed this automatic 'object restriction' classification.[28] Neither has there been a

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See also Glasow (2000: 231) ("Das Verbot der vertikalen Preisbindung im europäischen Recht ist rein ökonomisch nicht nachzuvollziehen."); id. (2000: 226) ("Das Verbot der vertikalen Preisbindung scheint deshalb einem kartellrechtlichen Axiom nahezukommen …").

[26] ECJ 3.7.1985, C-243/83, EU:C:1985:284 – *Binon*, para. 44. On this below.
This was confirmed in ECJ 19.4.1988, C-27/87, EU:C:1988:183 - *Erauw-Jacquery*, para. 15; ECJ 28.1.1986, C-161/84, EU:C:1986:41 – *Pronuptia*, para. 25.

[27] ECJ 25.10.1977, Case 26/76, EU:C:1977:167 – *Metro I*; ECJ 25.10.1983, C-107/82, EU:C:1983:293 – *AEG*; ECJ 22.10.1986, Case 75/84, ECLI:EU:C:1986:399 – *Metro II*.
On this below.

[28] For the opposite view see Amato (2013: 2) who argues that the ECJ has implicitly overruled its finding on RPM in *Binon* in its 2008 *CEPSA* ruling and confirmed this overruling in its 2009 *Pedro IV Servicios* ruling. Amato (2013) refers to ECJ 11.9.2008, C-279/06, ECLI:EU:C:2008:485 – *CEPSA*, para. 42 and 72 and ECJ 2.4.2009, C-260/07, ECLI:EU:C:2009:215 – *Pedro IV Servicios*, para. 82.
While the wording of the judgments cited by *Amato* is very broad and does not exclude such interpretation, it seems more likely that the Court did not intend to rule on the question of whether RPM is an object restriction or not, but merely noted in passing that besides the 'restriction of competition' also all the other conditions of Art. 101 (1) TFEU will have to be examined, in particular also the appreciability of the restriction (this was before *Expedia*), and pointing out that a clause falling outside a BER does not necessarily fall under Art. 101 (1) TFEU.

change in the Court's definition of 'object restriction' that could lead to the conclusion that under this supposedly new interpretation, namely that in *Cartes Bancaires,*[29] RPM would no longer be considered to fall into the 'object restriction' category.[30]

Once classified as object restriction, RPM is presumed to have an *appreciable* effect on competition,[31] thus also fulfilling automatically the unwritten condition of Art. 101 (1) TFEU that the agreement at issue must *appreciably* impact competition, foreclosing the possibility for RPM of small market players to escape the prohibition of Art. 101 (1) TFEU over the De minimis doctrine.[32] Although the *Expedia* presumption regarding the appreciability of the effect on competition does not apply to the also required appreciability of the effect on trade between Member States, this requirement of Art. 101 (1) TFEU neither provides a potential escape for RPM of small market players. The appreciable effect on Member State trade is in contrast to the (in case of 'object restrictions') presumed appreciability of the restriction of competition not a substantive, but only a jurisdictional criterion, which determines the scope of Art. 3 Regulation 1/2003, in which the relationship between EU and national competition laws is defined. While once crucial and in case of RPM considered to be particularly problematic,[33]

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[29] ECJ 11.9.2014, C-67/13 P, ECLI:EU:C:2014:2204 – *Cartes bancaires.*

[30] The ECJ's *Cartes Bancaires* ruling has been interpreted to narrow down the object restriction definition by stopping the practice of automatically classifying certain practices without further analysis of the economic context in the individual case, in particular because the Court found that the concept of object restriction should be interpreted "restrictively". *Fuchs* (as reported by Sekunde (2016: 170-1)) for example argues that thus in RPM cases economic considerations can already be considered under Art. 101 (1) TFEU.
This argument was refused by the Austrian Supreme Court (Kartellobergericht) in an appeal of a RPM prohibition decision. The Austrian Supreme Court ruled that the Vienna Cartel Court had rightly refused to consider economic arguments and it rejected the undertakings' argument that a heightened standard for the assessment of RPM has been introduced by the ECJ in *Cartes Bancaires* arguing that the ECJ ruling concerned a different context, in particular a different type of restriction and did not discuss the assessment of RPM. See Kartellobergericht, 8.10.2015 16 Ok 2/15b, p. 33 (sect. 5.8.6).

[31] The presumption that 'object restrictions' appreciably impact competition was created in the ECJ's *Expedia* ruling, in which it was held "that an agreement that may affect trade between Member States and that has an anti-competitive object constitutes, by its nature and independently of any concrete effect that it may have, an appreciable restriction on competition" (ECJ 13.12.2012, C-226/11, ECLI:EU:C:2012:795 – *Expedia*, para. 37).

[32] The requirement that the restriction of competition must be 'appreciable' was first formulated by the ECJ in *Völck* (ECJ 9.7.1969, 5/69, ECLI:EU:C:1969:35 – *Völck*, para. 5/7).
The Commission has provided guidance on the circumstances determining whether a restriction has a non-appreciable effect on competition in a series of so-called De Minimis Notices, the most recent of which was adopted 2014, using a market share approach.
In the accompanying Commission Staff Working Document offering guidance on the notion of restrictions of competition 'by object' RPM is listed as 'object restriction' that cannot benefit from the de minimis exception (Commission, Commission Staff Working Document – Guidance on restrictions of competition 'by object' for the purpose of defining which agreements may benefit from the De Minimis Notice, SWD(2014) 198 final, of 25 June 2014, 3.4).

[33] In the early days of EU competition law not all of the Member States had national competition laws, or they differed from EU law.
The jurisdictional criterion, though generally considered a low hurdle then, was often found not to be satisfied in the early RPM Commission cases (cf. Commission, First Report on Competition Policy (1972), para. 55; see also Korah and O'Sullivan (2002: 106, 110, 173). At that time the jurisdictional test was found to be "the most difficult question" about RPM, Joliet (1971: 594).

the jurisdictional criterion has lost its relevance, as most Member States have harmonized their national competition laws with EU competition law opting to treat purely national cases the same as cases with an effect on Member State trade, often not even determining whether in the individual case Art. 101 TFEU or the corresponding national law applies.[34]

This leaves the 'agreement between undertakings' requirement as potential escape, which is the threshold requirement for the application of Art. 101 (1) TFEU – once the agreement is found to exist, Art. 101 (1) TFEU automatically applies.[35]

2. The presumption that Art. 101 (3) TFEU does not apply

Even if RPM automatically falls within Art. 101 (1) TFEU once an 'agreement' is found to exist, it may still (at least theoretically) escape the prohibition contained in Art. 101 (1) TFEU through the legal exception provided for in Art. 101 (3) TFEU, which can be applied either to individual agreements or to categories of agreements by way of a block exemption regulation.[36]

But here again the EU's strict stance that is so heftily criticized is reflected. (Minimum and fixed) RPM can currently not benefit from a "safe harbor" of a group exemption. In the for vertical agreements applicable block exemption, issued by the Commission based on its power conferred upon it by Council Regulation 19/65[37], (minimum and fixed) RPM agreements are listed as a hardcore restriction in Art. 4 (a) Reg. 330/2010 that cannot benefit from the "safe harbor" provided for in Art. 2 Reg. 330/2010 for vertical agreements that meet the market threshold of Art. 3 Reg. 330/2010. This means that RPM is only exempted, if the parties to the

[34] Cf. e.g. the recent *Almased* decision, in which the *Bundesgerichtshof* confirmed that the issue of whether Art. 101 TFEU or the German equivalent applied could be left open (BGH 17.10.2017, KZR 59/16 – *Almased Vitalkost,* para. 24).
The lost relevance of the jurisdiction criterion is also reflected in the jurisprudence of the ECJ, in which the ECJ confirms its jurisdiction to give preliminary rulings with regard to Art. 101 (1) TFEU in cases, in which the practice at issue in the main proceedings is governed not by Art. 101 TFEU, but by the corresponding (and harmonized) provision of national competition. See for example ECJ 14.3.2013, C-67/13 P, ECLI:EU:C:2013:160 – *Allianz Hungária*, para. 18-23; ECJ 26.11.2015, C-345/14, ECLI:EU:C:2015:784 – *Maxima Latvija*, para. 12-14.
[35] There is thus a lot of pressure on this requirement, which is particularly problematic as the 'agreement' requirement is mostly interpreted from a contractual perspective whose connection to the economic purpose of Art. 101 (1) TFEU is, at least in vertical cases, unclear. On this see Lianos (2008).
On why the 'agreement' requirement is not further discussed in this thesis see above section I.
[36] Cf. Commission, Guidelines on Art. 81(3), para. 35.
[37] The current VBER entered into force on 1 June 2010 (Art. 10 VBER).

agreement show that their individual RPM agreement satisfies each of the conditions stipulated in Art. 101 (3) TFEU, they are not relieved of this burden under Art. 2 Reg. 1/2003.

From the jurisprudence of the European Courts it is clear that in general RPM, even though an object restriction and listed as hardcore restriction, may benefit from an individual exemption of Art. 101 (3).[38] Nevertheless, there is no legal decision in the EU, in which an RPM agreement has been found to satisfy the four cumulative conditions of Art. 101 (3) TFEU. In all its decisions, adopted before 2004 under the old procedural regime, the Commission consistently finds that RPM does not satisfy the conditions of Art. 101 (3) TFEU.[39] Since the modernization of the procedural regime the Commission has not adopted any decision on RPM, though has opened a couple of proceedings;[40] also on the national level, where the focus of enforcement lies, no decision can be found, in which RPM has been found to satisfy the conditions of Art. 101 (3) TFEU.[41] Though the Commission stresses that also RPM as a hardcore core restriction may in principle fulfill the conditions in Art. 101 (3) TFEU and that companies have the possibility to come forward with substantiated claims that RPM will bring about efficiencies,[42] it presumes that RPM is unlikely to do so.[43]

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[38] See for example the early CFI 15.7.1994, T-17/93, ECLI:EU:T:1994:89 – *Matra Hachette*, para. 85, noting that "no anti-competitive practice can exist which, whatever the extent of its effects on a given market, cannot be exempted, provided that all the conditions laid down in Article [101(3)] of the Treaty are satisfied". More recently see CFI 27.9.2006, T-168/01, ECLI:EU:T:2006:265 – *GlaxoSmithKline I*, para. 233; ECJ 13.10.2011, C-439/09, ECLI:EU:C:2011:649 - *Pierre Fabre*, para. 57.
With regard to RPM specifically see the ECJ's early *Binon* ruling, in which the Court, though not being able to rule itself on the application of Art. 101 (3) TFEU, emphasized, when confronted with arguments about the importance of the RPM agreement at issue for the distribution of newspapers and periodicals, that this would have to considered under Art. 101 (3) TFEU and may lead to an exemption (ECJ 3.7.1985, C-243/83, EU:C:1985:284 – *Binon*, para. 46 hints at the possibility of an exemption in this case).

[39] In most cases the Commission shortly rejects the granting of an exemption under Art. 101 (3) based on the reasoning that rpm does not contribute to improving the distribution of the products in questions and/or that rpm does not allow consumers a fair share of the resulting (Commission decision 29.6.2001, OJ [2001] L 262/14 - *Volkswagen II*, para. 95; Commission decision 5.7.2000, OJ [2001] L 54/1 - *Nathan-Bricolux*, para. 110; Commission decision 16.7.2003, COMP/37.975 – *Yamaha*, para. 175; Commission decision 22.12.1976, OJ [1977] L 16/8 - *GERO-fabriek*, section II. (b) p. 11); though sometimes it is not clear whether the Commission finds the improvement-criterion not fulfilled or the indispensability-criterion (see e.g. Commission decision 5.7.2000, OJ [2001] L 54/1 - *Nathan-Bricolux*, para. 110).

[40] In the aftermath of its sector inquiry into e-commerce the Commission has initiated several proceedings with regard to consumer electronics (see the investigations under the case numbers AT.40465 (Asus), AT.40469 (Denon & Marantz), AT.40181 (Philips), AT.40182 (Pioneer); cf. European Commission Press Release IP/17/201.

[41] Cf. for example the many prohibition / fine and settlement decisions of the Bundeskartellamt.

[42] Commission, EU contribution to OECD (2008: 226); id., Guidelines on Art. 81 (3), para. 46 (with reference to *Matra Hachette*).

[43] Commission, Vertical Guidelines, para. 223; id., EU contribution to OECD (2008: 226).
With regard to hardcore restrictions in general: Commission, Guidelines on Art. 81 (3), para. 46, 79; id., Vertical Guidelines, para. 47, 96.

C. The conflict between the EU's approach and the 'economic consensus'

The EU's automatic classification of RPM as 'object restriction' and the presumption that Art. 101 (3) TFEU does not apply to RPM, which makes the EU approach so strict, is perceived as not being consistent with economics.[44] Since the Supreme Court in its 2007 *Leegin* decision aligned the US approach to RPM to what is considered to be the 'economic consensus', the pressure on European legal decision makers to follow the example of *Leegin* and modify the EU's strict stance in view of the 'economic consensus' has become particularly strong. The economic position, which led the Supreme Court to give up its per se prohibition of RPM, is in particular the following.

1. The 'economic consensus' (as expressed in Leegin)

The most important point is the more general claim made in economics and referenced to in *Leegin* that the elimination of intrabrand competition associated with RPM is used to encourage retailers to invest in promotional efforts thus stimulating interbrand competition, which is found to be the more important form of competition, and thus increasing options for consumers in terms of different combinations.[45] It is assumed that "interbrand competition will mitigate any anticompetitive exercise of market power by the manufacturer imposing vertical restraints on its distributors".[46] This is found to mean that when it comes to supplier-driven RPM the interests of suppliers and consumers with regard to retailer margins are aligned; it is in particular assumed that the supplier has no interest in overcompensating retailers, as this will reduce its competiveness and market share in relation to suppliers of the same product on the interbrand level and the higher retail prices will let consumers switch to different brands of the same

[44] See e.g. Reindl (2010: 1303) finding that "[t]here is little doubt that the [EU's approach] are not aligned with the economic goals of [EU] competition law", adding that "[t]his in itself should be an uncontroversial conclusion that does not require further discussion".
See also Ibanez-Colomo and Lamadrid (2016: 30-31) (explaining the ECJ's approach to RPM as an "outlier" that does not fit its economics-based interpretation of Art. 101 (1) in other cases).
See also Ibanez-Colomo (2012: 553, 561) (arguing that the ECJ's approach to RPM cannot be explained by and diverges from the ECJ's economics-based methodology consistently found in other (vertical non-price) restraints cases).
[45] Leegin Creative Leather Products v. PSKS, 551 U.S. 877, 890 (2007).
[46] Van den Bergh (2016: 167-8).

product. The supplier uses RPM only where the increase in interbrand competition offsets the negative impact on demand of a higher retail price.[47]

The above more general arguments are supported by pointing to theoretical models that concretize the more general claim above and define the specific situations, in which RPM is used to increase demand by stimulating interbrand competition, namely by inducing dealer services; it is argued that RPM is necessary to induce the desired dealer services because of free riding, but also in the absence of free riding.[48] In particular free riding on services, on quality certification and on promotional efforts necessary for market entry are referenced.[49] To show that these theoretical models frequently apply empirical studies are cited.[50] Negative effects of RPM are thus expected only in exceptional circumstances, when the supplier uses RPM not to incentivize promotion, but to facilitate supplier or dealer collusion or where it is abused by a powerful supplier or dealer.[51] Again empirical studies are cited that show that these situations do not frequently occur.[52]

In short, RPM is considered benign, unless there is market power involved, because the elimination of intrabrand competition is outweighed by interbrand competition.

2. The EU approach from the perspective of the 'economic consensus'

If we consider the EU's approach from this perspective, it is indeed at odds with economics. The economic arguments used by the ECJ and Commission to justify the EU's strict stance are in conflict with what is currently considered to be the consensus in the economic literature.

(a) Art. 101 (1) TFEU

Both the ECJ and the Commission point primarily to the elimination of intrabrand price competition to justify the automatic classification of RPM as 'object restriction'. In addition to emphasizing the general effects resulting from the elimination of price competition on the dealer level the Commission also points to a couple of specific scenarios, in which RPM leads

[47] Leegin Creative Leather Products v. PSKS, 551 U.S. 877, 896 (2007).
[48] Leegin Creative Leather Products v. PSKS, 551 U.S. 877, 890 (2007).
[49] Leegin Creative Leather Products v. PSKS, 551 U.S. 877, 890 (2007).
[50] Leegin Creative Leather Products v. PSKS, 551 U.S. 877, 894 (2007).
[51] Leegin Creative Leather Products v. PSKS, 551 U.S. 877, 892-893 (2007).
[52] Leegin Creative Leather Products v. PSKS, 551 U.S. 877, 890, 894 (2007).

to negative effects on welfare. These are the same negative scenarios, which are also acknowledged by the 'economic consensus' and also cited in *Leegin*, in particular the facilitation of collusion on the supplier or dealer level.[53] The Commission furthermore points to a scenario, which is not acknowledged by the 'economic consensus', namely to the possibility that RPM may be used by a supplier to solve a commitment problem to reduce pressure on its margin.[54] But the main justification of both, the ECJ and the Commission, for the prohibition of RPM (and the main reason for divergence from the economic consensus) is that intrabrand competition is eliminated, which – and this is the main divergence from and conflict with the economic consensus – is considered harmful in itself without considering that it may be counterbalanced through an enhancement of interbrand competition.

The focus on the elimination of intrabrand competition can be found in the ECJ's early decisions, in which the ECJ points to the wording of Art. 101 (1) (a) TFEU, which lists the fixing of prices as example for a restriction of competition, and thereby equates horizontal and vertical price fixing, or in which the ECJ refers to the restriction of the dealer's freedom to determine his own prices.[55] The importance of price competition also on the dealer level is then again stressed by the court in *Metro I;* though not directly ruling on RPM here, the court holds in passing that "price competition is so important that it can never be eliminated"[56]. The court here essentially considers RPM harmful because it eliminates the price competition between the dealers; that this intrabrand price competition may be motivated (and then possibly outbalanced) by the enhancement of interbrand competition is not considered. The Commission justifies the classification of RPM as 'object restriction' by presuming that RPM has on the balance of probabilities negative effects on competition[57] and points, similar to the ECJ, to the general reduction in intrabrand price competition that results from RPM. This has according to the Commission the direct effect of a price increase as dealers are prevented from lowering their sales prices and may also hinder new dealers from entering the market with low prices, which may reduce dynamism and innovation on the distribution level.[58] Again that the elimination of

[53] Commission, EU contribution to OECD (2008: 227); id., Vertical Guidelines, para. 224.
[54] Commission, EU contribution to OECD (2008: 227); id.; Vertical Guidelines, para. 224.
[55] Literal reading of Art. 101 (1) (a) TFEU: ECJ 3.7.1985, C-243/83, EU:C:1985:284 – *Binon*, para. 44; ECJ 19.4.1988, C-27/87, EU:C:1988:183 - *Erauw-Jacquery*, para. 15.
Freedom explanation: ECJ 28.1.1986, C-161/84, EU:C:1986:41 – *Pronuptia*, para. 25.
[56] ECJ 25.10.1977, Case 26/76, EU:C:1977:167 – *Metro I*, para. 21.
[57] Commission, EU contribution to OECD (2008: 227).
[58] Commission, EU contribution to OECD (2008: 227); id., Vertical Guidelines, para. 224.

intrabrand competition may be justified because of the enhancement of interbrand competition, as the 'economic consensus' claims, is not considered.

The ECJ further explains why it rejects the consideration that RPM may enhance interbrand competition in its jurisprudence on selective distribution. Despite the ECJ's apparent focus on and absolutization of price competition in its assessment of RPM, the ECJ elsewhere accepts a reduction of (intrabrand) price competition, though only an indirect one; and here the court more specifically explains why it considers the elimination of intrabrand *price* competition an 'object restriction'. For distribution restraints necessary in a selective distribution system, i.e. a distribution system where the supplier sells the contract goods only to distributors selected on the basis of specified criteria, the ECJ carved out an exemption from Art. 101 (1) TFEU. While explicitly acknowledging that selective distribution comes with a reduction in price competition, the Court accepts here that the price is not the only relevant parameter of competition and considers selective distribution an aspect of competition where it pursues a legitimate aim capable of improving competition in relation to factors other than price[59]. But while there are two legitimate aims accepted, which a selective distribution system may seek to achieve, with the result that the reduction in price inherent in the system is counterbalanced, namely guaranteeing the provision of (high-quality) services typically provided by specialist traders and protecting the image of luxury goods[60], the ECJ has made very clear that the direct and full elimination of intrabrand price competition through RPM cannot be justified and escape the 'object restriction' classification this way. The reason the Court gives in *AEG* is that the legitimate aim that the selective distribution system pursues, in *AEG* getting dealers to provide high-quality services (typically associated with specialist trade), and that justifies the reduction in price competition inherent in such a system, because it enhances competition based on services, can be achieved by admitting only traders that provide the desired service level.[61]

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[59] ECJ 25.10.1977, 26/76, EU:C:1977:167 – *Metro I*, para. 20, 21, 22; ECJ 25.10.1983, C-107/82, EU:C:1983:293 – *AEG*, para. 33, 34, 73; ECJ 22.10.1986, 75/84, ECLI:EU:C:1986:399 – *Metro II*, para. 45; CFI 12.12.1996, T-88/92, ECLI:EU:T:1996:192 – *Leclerc*, para. 106; ECJ 13.10.2011, C-439/09, ECLI:EU:C:2011:649 - *Pierre Fabre*, para. 40.

[60] The escape from the finding of an 'object restriction' based on the first legitimate aim (**dealer services**) that may necessitate selective distribution and thus may justify restraints necessary for the organisation of such system was developed in ECJ 25.10.1977, Case 26/76, EU:C:1977:167 – *Metro I*; ECJ 25.10.1983, C-107/82, EU:C:1983:293 – *AEG*; ECJ 22.10.1986, Case 75/84, ECLI:EU:C:1986:399 – *Metro II*.
That also the **protection of image** may justify the restraints inherent in selective distribution under Art. 101 (1) has been confirmed just recently by the ECJ in *Coty Germany* (ECJ 6.12.2017, C-230/16, ECLI:EU:C:2017:941 – *Coty Germany*, para. 25-29, 36). But see the earlier *Pierre Fabre*, in which the ECJ held that "[t]he aim of maintaining a prestigious image is not a legitimate aim for restricting competition and cannot therefore justify a finding that a contractual clause pursuing such an aim does not fall within Article 101(1) TFEU" (ECJ 13.10.2011, C-439/09, ECLI:EU:C:2011:649 - *Pierre Fabre*, para. 46).

[61] ECJ 25.10.1983, C-107/82, EU:C:1983:293 – *AEG*, para. 43 notes that "[b]y the very fact that it was authorized not to admit to and not to keep in its distribution network traders who were not, or were no longer, in a position to

Guaranteeing dealers a high margin through fixing minimum prices and choosing only dealers that adhere to the prices is according to the Court not necessary to guarantee the provision of the costly services; as the reduction of price competition is justified only to the extent to which it is used to ensure competition based on (high-quality) services, but the aim can be achieved otherwise, RPM cannot be justified based on the argument that it is counterbalanced by the enhancement service competition.[62]

(b) Art. 101 (3) TFEU

With regard to Art. 101 (3) TFEU the EU approach, under which an exception from the prohibition of Art. 101 (1) TFEU is presumed to be highly unlikely, is justified as follows. The Commission draws here the same distinction between nonprice and price vertical restraints like the ECJ under Art. 101 (1) TFEU. In general the Commission accepts the view of the economic consensus that the supplier may use the elimination of intrabrand competition to enhance its position on the interbrand level and that thus the enhancement of interbrand competition may justify the restriction of intrabrand competition[63]. The Commission envisions here a weighing process similar to that undertaken by the ECJ under Art. 101 (1) TFEU[64].

With regard to RPM specifically though, the Commission is of the opinion that RPM in most cases will not be indispensable to attain the claimed efficiencies, or sometimes not even be able to realize the claimed efficiencies so that this weighing process – which is reconcilable with the economic consensus – will never be reached. The indispensability argument is similar to that of the ECJ above, where it holds that with the ability to deal only with selected traders the

provide services typical of the specialist trade, it had at its disposal all the means necessary to enable it to ensure the effective application of the system. In such circumstances the existence of a price undertaking constitutes a condition which is manifestly foreign to the requirements of a selective distribution system and thus also affects freedom of competition." AEG para 43

[62] ECJ 25.10.1983, C-107/82, EU:C:1983:293 – AEG, para. 73. On this see also below chapter 3 III.C.2.

[63] In its Guidelines the Commission finds "that vertical restraints [in general] may have positive effects by, in particular, promoting non-price competition and improved quality of services", in particular in situations in which "the usual arm's length dealings between supplier and buyer, determining only price and quantity of a certain transaction, can lead to a sub-optimal level of investments and sales" and that these may offset negative effects listing situations in which this may be the case, i.e. in which vertical restraints may have positive effects" (Commission, Vertical Guidelines, para. 106-7).
The situations are listed in para. 107 (a) – (i).

[64] Cf. Commission, Vertical Guidelines, para. 223 according to which it is on the companies claiming the benefit of Art. 101 (3) TFEU to demonstrate that all conditions are met (Art. 2 Reg. 1/2003), in particular that they lead to efficiencies that may possibly outweigh their negative effects and they are indispensable in achieving those efficiency; it only then falls on the Commission to assess the negative effects from an agreement and to decide whether they are outweighed by the substantiated efficiencies.
With regard to vertical agreements in general cf. Commission, Vertical Guidelines, para. 96, 122

guaranteeing of a margin through fixing dealer prices is not necessary to enhance service competition. The Commission generally stresses the substitutability of vertical restraints;[65] and though noting that supplier-driven RPM may have positive effects[66] and acknowledging the individual scenarios, in which it is often argued that RPM leads to efficiencies,[67] it argues that those efficiencies arguments are not very strong and that RPM is in particular not an efficient instrument for bringing about efficiencies,[68] primarily because there are other less restrictive means making RPM not indispensable. The Commission thus diverges here from the general claim of the economic consensus that also in case of vertical price restraints the elimination of intrabrand competition is most likely used by the supplier to enhance its position on the interbrand competition level.

The Commission also diverges from the economic consensus with regard to the specific explanation that RPM enhances interbrand competition through the elimination of free riding. The Commission rejects the three free rider explanations accepted by the economic consensus as unlikely to bring about efficiencies; and it completely ignores the explanation that RPM may be used to enhance service competition also in the absence of free riding. Though the Commission lists the free-riding explanation of RPM in its Vertical Guidelines as explanation for why RPM may have positive effects, it at the same time claims that RPM cannot solve the underlying free-riding problem and is thus not an efficient solution pointing to better suitable options;[69] it also questions the theoretical consistency of the free-rider explanation.[70] Also the special case of the free riding problem in the specific scenario of market entry is mentioned in the Commission's Guidelines as possible scenario in which RPM may have positive effects, but again the Commission claims that RPM is not an efficient solution pointing to less restrictive and more efficient solutions, in particular cautioning that RPM in this scenario may satisfy the conditions of Art. 101 (3) TFEU only where it is not practical for the supplier to impose the

[65] Commission, Vertical Guidelines, para. 109.
[66] Commission, Vertical Guidelines, para. 225; Commission, EU contribution to OECD (2008: 228).
[67] Potential efficiency benefits are mentioned in Commission, Vertical Guidelines, para. 225 and Commission, EU contribution to OECD (2008: 228-9).
[68] Commission, EU contribution to OECD (2008: 228-9, 231).
[69] The full argument is found in Commission, EU contribution to OECD (2008: 228); it has found its way into the Vertical Guidelines, as the Commission states here, after pointing to the free-rider explanation, that "[t]he parties will have to convincingly demonstrate that the RPM agreement can be expected to not only provide the means but also the incentive to overcome possible free riding between retailers on these services" (Commission, Vertical Guidelines, para. 226).
[70] The Commission questions the prediction of positive welfare effects in the free rider explanation by raising the issue of whether the RPM-induced promotion would be in the overall interest of consumers (Commission, EU contribution to OECD (2008: 228, Fn. 11).

promotion requirements by contract.[71] The Commission considers RPM neither an efficient solution in the second special case of the free riding problem, namely that of certification free riding; though acknowledged in the Guidelines as situation, in which vertical restraints in general may have positive effects, certification free riding is not listed in the Commission's section on RPM and the Commission does not mention RPM as efficient solution to this problem in its general explanation of the justification pointing to other vertical restraints instead.[72]

3. Conclusion: The main area of conflict

The main area of conflict between the EU approach and the economic consensus is that in the EU the claim that the restriction of intrabrand price competition is justified by the enhancement of competition on the interbrand level is not accepted. While with regard to *nonprice* restrictions both the ECJ and the Commission under both Art. 101 (1) and (3) TFEU accept this type of argument, this is not accepted for vertical *price* restraints (RPM). This is what leads the EU to the presumption of negative effects and the presumption of the unlikelihood that potential efficiencies can lead to an exception under Art. 101 (3) TFEU.

III. Research question and structure of the argument

Having defined the main area of conflict between the EU approach and the economic consensus the research question of whether the prohibition of RPM is economically justified can be specified as follows. The main area of conflict regards the claim of the economic consensus that RPM, when used by a supplier to enhance its position on the level of interbrand competition in the absence of (horizontal) market power, is not detrimental to welfare and thus neither to

[71] The full argument is found in Commission, EU contribution to OECD (2008: 228-9); it has found its way into the Vertical Guidelines as the Commission, Vertical Guidelines, para. 225 cautions that positive effects in the market entry scenario can only be assumed where "it is not practical for the supplier to impose on all buyers by contract effective promotion requirements".

[72] The Commission notes in its general part that certification free riding may justify short-term selective or exclusive distribution.

competition. The economic consensus bases this claim, from which both European courts and Commission diverge, on two grounds:

First, it is assumed that a rational supplier uses RPM only where it enhances its position on the interbrand level; unless market power is involved the supplier's interests are thus considered to be aligned with consumer interests and the elimination of intrabrand price competition is found to be outbalanced by the enhancement of interbrand competition. Positive effects on welfare are predicted.

Second, specific situations are defined of how the supplier enhances interbrand competition through RPM, namely through eliminating free riding on services, quality reputation or in the new market scenario thereby inducing services and in addition by using RPM as contract enforcement mechanism to induce services in the absence of free riding.

The thesis challenges these claims of the economic consensus.

1.

In the first two chapters the specific theoretical models, with which the economic consensus concretizes its broader claim that RPM is used to enhance interbrand competition, are challenged in terms of their empirical relevance.

Chapter 2 critically dissects the economic evidence cited by the economic consensus to support the claim that the positive RPM models, i.e. those that predict positive effects, because interbrand competition is enhanced, will frequently apply. It does so by closely analyzing the empirical methods used, in particular their limits and validity. The aim of the chapter is to ascertain how strong the empirical basis is, on which economists base the claim that in the battle of good versus bad RPM the positive service-based models are the winner, are more consistent with real world data. It concludes that there is no convincing evidence that RPM is most often benign or that frequently the positive dealer-services models apply.

Chapter 3 follows up on this finding by collecting new evidence. It is an attempt to add to the evidence that can be used to determine which RPM models are most consistent with the real world phenomenon of RPM. The chapter uses an empirical method encountered in chapter 2, the 'apparent likelihood standard'. Chapter 3 combines this empirical method with insights from the marketing literature. These findings from a business discipline are useful because they consider consumer behavior, in particular in the newly emerged information environment, and the applicability of the positive RPM models depends on consumer behavior. Applying this

empirical method to the service-based RPM the chapter comes to the conclusion that it is highly unlikely that the often-cited service-based RPM models apply.

2.

Taking to heart the scientific method that "it takes a theory to beat a theory"[73] chapter 4 provides plausible alternatives for the refuted service-based positive RPM models of the economic consensus. Three price-based models are examined, in which RPM is desired not to induce services, but to secure a uniform high price level, which is used by the supplier to create the perception of a high quality of the good; this perception of high quality is used either as quality signal (price model 1) or becomes a component of the product (price model 2) or is used as a false signal of quality to bias the consumer decision (price model 3). The models are examined in their relationship to the service-based models, and it is argued that it is a very small shift from the refuted service-based models to the price-based RPM models. This shift is illustrated in table 1.[74] The models are examined from the perspective of welfare effects and it is shown that with the shift from service to price the difficult terrain of markets of intangible product elements and consumer preference formation is entered, with which welfare economics has its difficulties.

Due to the difficulties with the prediction of welfare effects in the price models encountered in chapter 4, chapter 5 then broadens the economic perspective. Arguing that law is not limited to considering only one particular sub-discourse of economics, namely that that focuses on the prediction of welfare effects, the idea of competition as a discovery procedure is added into the considerations. The aim of chapter 5 is to show that the price-based models may lead to a broad theory of harm with which the EU's strict approach can be justified.

[73] Stigler (1992: 62) as cited by Wright (2009: 359).
[74] Chapter 4 section III.B.2.

Chapter 2: The evidence of the economic consensus on RPM

I. Introduction

As seen in chapter 1 the EU's approach's main flaw (and this is where its current vulnerability lies) is that it is perceived as not being consistent with economics[75] and thus lacking an economic justification.[76] The main argument behind the strong critique on the EU's approach is that the economic literature clearly shows that (fixed and minimum) RPM is a plausible source of efficiency gains that has typically and plausibly and in most cases positive effects on (consumer) welfare. These positive effects are found to outweigh the restriction of intrabrand price competition that directly results from RPM.

This chapter takes a closer look at this 'economic consensus' that is referred to in the European debate and that led the Supreme Court to abandon its per se prohibition of RPM; the focus is put on dissecting the empirical evidence, which is used by the economic consensus to support the claim that RPM is most often benign.

Although there is no such thing as a fully uniform 'prevailing view' or ' economic consensus', the variations in the arguments that support the undisputed conclusion that RPM is almost always benign are so small, they can be neglected for the sake of clarity here.[77] The 'economic consensus' is reflected in particular in the '*Brief of Amici Curiae Economists in Support of Petitioner'* in the Supreme Court's *Leegin* decision;[78] *Klein* and *Wright* are two of the

[75] See e.g. Reindl (2010: 1303) finding that "[t]here is little doubt that the [EU's approach] are not aligned with the economic goals of [EU] competition law", adding that "[t]his in itself should be an uncontroversial conclusion that does not require further discussion".
See also Ibanez-Colomo and Lamadrid (2016: 30-31) (explaining the ECJ's approach to RPM as an "outlier" that does not fit its economics-based interpretation of Art. 101 (1) in other cases).
See also Ibanez-Colomo (2012: (553: 561) (arguing that the ECJ's approach to RPM cannot be explained by and diverges from the ECJ's economics-based methodology consistently found in other (vertical non-price) restraints cases).

[76] Ibanez-Colomo (2012: 553) for example, argues that RPM cannot be explained by the ECJ's economics-based default methodology because "the potential efficiency explanation for vertical price fixing have been identified for over 50 years, and [] the **consensus among economists** is that this restraint cannot be equated in any way to "naked" cartels" and points to Motta et al. (2009) who summarize the economic consensus position.

[77] What is meant is that the different proponents of what is termed 'consensus' or 'prevailing view' here for example only slightly differ with regard to what empirical material is cited; it is the same material, over and over again, but some for example emphasize effects studies, others the incidence studies (on the different types of empirical material used to support the consensus see below …).

[78] Economists Brief Leegin (2007). A short summary of the 'economic consensus' can also be found in the US contribution to OECD (2008: 213).

proponents that are currently defending this position particularly vehemently,[79] but the position goes back to *Bork*.

The current prevailing view in economics, mostly referred to here as 'economic consensus' or 'prevailing view', is based on the largely undisputed, available theoretical models that explain the different motives behind the use of RPM and predict either positive or negative effects on welfare depending on the circumstances, thereby establishing a neat binary structure of 'good' versus 'bad' RPM. The models concretize *Bork's* basic insight that RPM, in particular where supplier-initiated, cannot involve an antitrust problem because "[n]o manufacturer or supplier will ever use resale price maintenance for the purpose of giving the reseller a greater-than-competitive return" so that a manufacturer's motive for using resale price maintenance "cannot be the restriction of output and, therefore, can only be the creation of distributive efficiency"[80], which is subject to only a few narrow exceptions.[81]

From these theoretical models, which like all models in science "do not reflect truth, but rather useful abstractions for explanation and prediction"[82], the prevailing view picks 'the winner of the battle' by testing them against real world data, determining which model based on the available data is most consistent with the real world phenomenon of RPM.[83] It posits that there is "overwhelming evidence"[84] based on which currently only one conclusion can be reached: RPM is generally benign[85]. Importantly, and we will come back to this in the latter chapter on the policy implications, the prevailing view also posits that the prediction of effects based on the available data should also lead the policy-maker, i.e. it transfers the 'scientific method' and its focus on 'consequentialism' directly into legal policy-making.[86]

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[79] See in particular Wright (2014); Klein (2009); Klein (1999); Klein (2009a):
Also Lambert and Wright (2008); Lambert (2010).

[80] Bork (1978/1993: 290, 289). Bork's insight is frequently referred to by the 'consensus view', see for example Klein (2014: S172) considering this insight to be "fundamentally correct".

[81] *Bork* acknowledges that RPM may be used to support a manufacturer or dealer cartel but points to the narrow conditions under which this could be the case.

[82] O'Brien (2008: 41, Fn. 1). Similar Bishop (2013: 72) points out that "[m]odels are not [] descriptions of reality", "[they] are metaphors that compare the object of their attention to something else that resembles it", but that "resemblance is always partial".

[83] On the 'scientific method' see for example O'Brien (2008: 42-43); Stigler (1992).
See also Wright (2009: 23) on how this 'scientific method' should also be used by policy-makers.

[84] Wright (2009: 22).

[85] For example Wright (2009: 15) speaks of a 'consensus' noting that "[e]conomists nearly universally agree that while RPM can generate anticompetitive outcomes in some instances … it is generally pro-competitive".
For references to individual scholars (authors) that are part of this 'consensus view' see below.

[86] In chapter 5 it is considered how the economic findings should be translated into the law; and it is found that the law is not limited to only look at one particular discourse in economics (e.g. on welfare effects), as competition can be described from different angles. On the methodology see below chapter 5 II.

Chapter 2 follows the two-step scientific method used in economics, which posits theoretical models whose consistency is then tested against real world data.

Section II introduces the theoretical models available in the economic literature that explain the different motives behind the use of RPM and predict either positive or negative effects on welfare depending on the circumstances.

Section III is the main focus of the chapter and its main contribution to the RPM debate. In section III the empirical literature, which is cited by the 'economic consensus' as evidence that RPM is most often benign in terms of welfare effects, is critically dissected. As like all models in science the RPM models available in the economic literature "do not reflect truth, but rather useful abstractions for explanation and prediction"[87], the step in which economists pick 'the winner of the battle' by determining which model based on the available data is most consistent with the real world phenomenon of RPM,[88] is critical for policy formulation. The section aims to analyze the supposedly "overwhelming"[89] empirical evidence on which the 'consensus view' bases its position.

As to the selection of models we look at the models that are the focus of the 'economic consensus' view, i.e. on which the claim in the economic literature is based that RPM is most often beneficial. The aim is to evaluate how strong the claim of the 'economic consensus' that RPM is most often benign is. These are also (largely) the models that the Supreme Court considers in *Leegin* and the Commission in its Vertical Guidelines, though the Commission does not address the contract enforcement/Klein model, i.e. the only model, which applies also in the absence of free riding. Both legal actors draw a different conclusion from the economic literature – the Supreme Court finds that RPM will most often be benign, the Commission argues that these models do not apply, thus coming to its presumption of the unlikelihood of positive effects.[90] With regard to RPM models that predict positive effects on welfare ('positive models') these are in particular the free riding models (free riding in general; free riding on quality certification; free riding in case of market entry) and the contract enforcement model (by *Klein*), though the latter is not addressed by the Commission or the EU debate in general.[91]

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[87] O'Brien (2008: 41, Fn. 1). Similar Bishop (2013: 72) points out that "[m]odels are not [] descriptions of reality", "[they] are metaphors that compare the object of their attention to something else that resembles it", but that "resemblance is always partial".
[88] On the 'scientific method' see for example O'Brien (2008: 42-43); Stigler (1992).
See also Wright (2009: 23) on how this 'scientific method' should also be used by policy-makers.
[89] Wright (2009: 22).
[90] On this above chapter 1.
[91] For the models addressed by the Supreme Court see *Leegin Creative Leather Products v. PSKS,* 551 U.S. 877, 890-891 (2007).

With regard to RPM that predict negative effects on welfare ('negative models') these are in particular the collusion- and market power-based models to which already *Bork* refers and which are considered by the Commission and the Supreme Court. Following their historical development throughout the economic literature, the section provides the background for the main focus of the chapter.

Left out is the 'demand uncertainty model', a 'positive model' in which RPM is used by the supplier in order to induce dealers to hold sufficient inventories in the presence of demand uncertainty.[92] We will not look at this model because the 'economic consensus', which is dissected in this chapter, does not base its position on it, but rather – just like some defenders of the EU's strict stance[93] – firmly rejects the model.[94]

Also not considered are newer negative models that have been largely ignored by the 'economic consensus'. The aim of the chapter is to contribute to the conflict with regard to the interpretation of the economic evidence on the RPM models and in particular to examine how strong the evidence is, which the 'economic consensus' cites in support of its claim that RPM is most often benign. Thus the focus is put on the material cited by the 'economic consensus'. Not considered in this chapter is the RPM model, in which RPM is explained by a monopolistic supplier's intent to protect upstream monopoly rents through using RPM.[95] Neither is the newer strand of models considered that explain the use of RPM in markets characterized by "interlocking relationships", i.e. by a situation in which suppliers distribute their products through the same competing retailers. [96] In these models RPM reduces the incentives to behave aggressively or to bargain for lower wholesale prices thereby dampening competition.[97]

For the models addressed by the Commission see Commission, Vertical Guidelines 2010, para. 225.

[92] Denneckere et al. (1996); Denneckere et al. (1997).

[93] For defenders of a strict stance towards RPM, who reject the demand uncertainty model see Peeperkorn (2008: 211); American Antitrust Institute (2007: 21); Iacobucci (1995: 84-89), Paldor (2007: 211-221).

[94] See e.g. Klein (2014: S168) finding that "contrary [to the assumption of the model] manufacturers commonly induce retailers to hold increased inventories by subsidizing the financing of inventories, instituting liberal return policies, or providing wholesale price refunds for unsold products" .

[95] Hart and Tirole (1990) and O'Brien and Shaffer (1992).

[96] For the definition of 'interlocking relationships' see e.g. Rey and Vergé (2010: 930, 952).
Economic literature on RPM in interlocking relationships includes Rey and Vergé (2010); Rey and Vergé (2004); Rey and Vergé (2002); Dobson and Waterson (2007: 935-962).

[97] See Motta *et al.* (2009: 2) for a brief description with further references.

II. The theoretical models of 'good' and 'bad' RPM

This section introduces the theoretical models, on which the 'economic consensus' bases its claim that RPM is most often beneficial, following their historical development throughout the economic literature. The section provides the background for section III, in which the empirical literature on the models' empirical validity is dissected.

The use of RPM is at first sight puzzling for economists. Why would a (rational) manufacturer, facing a downward-sloping demand curve, want to use RPM? Other things being equal, for the manufacturer a higher price equals a lower quantity being sold, a lower retail price a higher quantity being sold; once the supplier has set the wholesale price, the lower the retail price, the higher his profit will be. In short, the setting of RPM is a cost for the supplier, which the supplier will incur only, if overall his profits are increased. So why would a manufacturer want to prevent retailers from competing on and lowering retail prices?[98] Economists have developed two types of answers to this puzzle showing how a supplier can use RPM to increase demand.

The first, and this is the dominant, answer economists have been giving is that other things are not equal, that demand depends on and can be shifted by (changes in) other factors than price, in particular the provision of services, and that RPM is used by the manufacturer to influence those other factors that shift the demand curve. It is specifically argued that RPM is used to induce demand-enhancing retailer activities at the point-of-sale. By providing specific explanations of how through the inducement of services sales can be increased, these models concretize *Bork's* early insight that the motive behind the use of RPM cannot be the restriction of output and must thus be the intention to increase sales by increasing distributive efficiency, which then is equated with an increase in welfare.[99]

[98] See already Telser (1960: 86) ("Would not the manufacturers' sales and profits be greater the lower is the price at which distributors resell their products to consumers?").

[99] Bork (1978/1993: 289) ("When a manufacturer wishes to impose resale price maintenance … … this motive cannot be the restriction of output and, therefore, can only be the creation of distributive efficiency.");
Bork (1978/1993: 297) ("Basic economic theory tells us that the manufacturer who imposes such restraints cannot intend to restrict output and must … intend to create efficiency. The most common efficiency is the inducement or purchase by the manufacturer of extra reseller sales, service, or promotional effort.");
Bork (1966: 403) ("And it can hardly be imagined that a competitive manufacturer using vertical price fixing … is moved by an altruistic impulse, verging on the suicidal, to give its resellers greater-than-competitive profits at its own expense. In the case of an individual manufacturer's imposition of restraints upon competition among its resellers, therefore, the manufacturer's motive can never be restriction of output. An alternative explanation for the manufacturer's behavior is necessary, and the only satisfactory alternative hypothesis is that the manufacturer believes the restraint will increase its net revenue by increasing distributive efficiency.").

Nevertheless, and this has been recognized from the beginning and is the second type of answer to the RPM puzzle, in certain contexts RPM may be used in an anti-competitive, welfare-reducing way, in particular as means to support the manufacturer (and in one case the dealers) in increasing profits through horizontal co-ordination or exclusion RPM being connected here to the exercise of market power.[100]

A. The positive models

In the RPM models that predict an increase in welfare the manufacturer offers the retailer a higher margin through RPM in order to induce retailers to provide demand-enhancing services, i.e. all positive models cited by the 'economic consensus' are service-based and can be collectively referred to as 'dealer-services theories'. There are two questions that these models must answer in order to support their claim: first, if the supplier desires the services because they increase sales, then why would retailers not provide them on their own initiative to increase their sales?[101] And second, why does the manufacturer not contract directly for the desired services?[102]

1. Why retailers have an insufficient incentive to supply the desired point-of-sale services

(a) Horizontal free riding

The answer to the first question of why retailers lack a sufficient incentive to supply the desired services[103] has for long been the well-known "free-rider story"[104]. The individual dealer has no incentive to invest in and provide the desired services, if it must fear that other dealers take a

[100] Compare Klein (2014: S174) "distinguishing between a retailer's demand for resale price maintenance that is an exercise of market power and a retailer's demand for resale price maintenance that is a demand for competitive compensation for the provision of its retailing services in connection with the sale of the manufacturer's products".
[101] Compare Scherer and Ross (1990: 551) ("[W]hy must the manufacturer take the initiative in raising retail prices and hence margins? If superior service sells more goods, why don't retailers choose a high-margin, high-service policy on their own initiative?").
[102] Compare Wright (2009: Fn. 82) ("A second critical economic question is why the compensation for the desired promotional services takes its particular form [of RPM].").
[103] Compare Scherer and Ross (1990: 551) ("[W]hy must the manufacturer take the initiative in raising retail prices and hence margins? If superior service sells more goods, why don't retailers choose a high-margin, high-service policy on their own initiative?").
[104] Dealer free riding is a popular explanation since Telser (1960).

"free-ride" on its investment in and provision of the services. Free riding occurs if the consumer can first visit the full-service dealer to obtain valuable promotional services (such as product information) and then purchase the product from a dealer who does not provide the services and can thus sell at a lower price. The full-service dealer then will have no incentive to provide the services in the first place. The models differ depending on the pre-sale service that RPM is needed to induce.

(i) The 'Telser model': Product-specific services

The free-rider explanation of RPM became popular through the 'Telser model' of 1960.[105] In *Telser's* model RPM is used by the manufacturer in order to induce dealers to provide tangible, product-specific pre-sale services, which increase demand but would not be provided otherwise due to free riding. The model's limited applicability to only a narrow set of product categories, namely to products whose demand crucially depends on product information and demonstration and whose cost is high enough so that it is worth for the consumer to consult one outlet before purchasing at another, was noted early on[106] so that economists looked for ways to expand the Telser model.

(ii) The 'Marvel/McCafferty model': Store as quality signal

The Telser model was then expanded, from a focus on tangible pre-sale services to intangible, store-wide services, in particular the "quality certification" service provided by a "high-quality" retailer. This explanation, which became popular through a Marvel/McCafferty article of 1984[107] and was developed in the aftermath of the Supreme Court's *Sylvania* decision,[108] was at that time thought to be more broadly applicable than the Telser model, though the prevailing

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[105] Telser (1960). *Telser* refers back to Taussig (1916) and Silcock (1938).
See also already Bowman (1955: 841-842).

[106] See the often-cited passage from Pitofsky (1984: 29) ("But think for a moment about the product areas in which [RPM] has appeared – boxed candy, pet foods, jeans, vitamins, hair shampoo, knit shirts, men's underwear. What are the services we are talking about in these cases?").
On the requirement that the goods must be costly, see e.g. Klein (1999: 7) pointing to "costly consumer durable products, such as consumer electronics goods" as example for the Telser model explaining that "[t]his makes economic sense since it is often cost effective for consumers making large purchases to expend the time and effort to first shop a full service dealer before buying the product at a low service discount dealer".
More on the limited applicability below.

[107] Marvel and McCafferty (1984). This explanation can be found also already in slightly earlier work, in particular in the case studies of Oster (1982) and Greening (1981), which were published within the FTC's Vertical Restraints Impact Evaluation Project (Lafferty et al. (1984)).

[108] The Sylvania decision (*Continental TV v GTE Sylvania*, 433 US 36 (1977)), in which the Supreme Court made vertical non-price restraints, but not vertical price restraints, subject to the rule of reason, renewed the controversy surrounding RPM. The FTC report by Lafferty et al. (1984) aimed to contribute to this debate, in it the quality certification model is (for the first time) at length discussed. Compare the introduction in Lafferty et al. (1984: 1-4); reference to *Sylvania* also by Greening (1981/1984: 94).

view of today acknowledges its limits.[109] A retailer that has invested in creating the reputation to only stock high-quality products through its "general method of doing business"[110] can signal the high-quality of a product, i.e. provide the supplier's product with a "quality or prestige stamp"[111], by merely stocking the product, but will not have the incentive to do so, if other dealers who do not incur the cost of creating and upholding a "high quality" reputation can offer the product at lower prices to consumers who have been persuaded of the product's quality through the "high quality" dealer carrying the product.

(iii) New entrants.

The free rider rationale is said to apply in particular to the situation of a new entrant. In this explanation RPM is used by a rational manufacturer to enable him to enter the market with a new product, RPM being necessary to convince dealers to carry the new, unproven product and to invest in its initial promotion necessary to familiarize consumers with the new product.[112] The new entrant explanation is an application of the Telser model to the specific situation of a new product, which requires an increased level of services, which dealers are not willing to provide unless other dealers are prevented from free riding on their service provision.[113] Similarly, if the service the new product requires is a 'quality signal', it can also be a specific case of application of the Marvel/McCafferty model.

(b) Incentive conflict absent free riding: services that lack inter-retailer demand effects

As many economists remained sceptic about the breadth of the free rider explanation, even if the quality certification expansion is taken into account, an alternative explanation for why retailers lack adequate incentives to provide promotional services has been developed more recently and has become the main focus of the prevalent view, as we will see below. The way for this explanation was paved when *Klein* and *Murphy* recognized in a 1988 article that the primary role RPM plays in the Telser model is not the elimination of free riding (they showed

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[109] Lafferty *et al.* (1984: 34-36); Marvel and McCafferty (1984); Marvel and McCafferty (1985). See also Marvel (1994: 65-67).
Casual empiricism was found to suggest that the quality certification explanation was frequently more plausible than the Telser model. See e.g. Lafferty *et al.* (1984: 34) ("In each of the RPM studies the consultants found that vertical restraints were being used to protect the signal of high quality created by the retailers' general method of doing business.") referring to the case analysis of Oster (1982/1984) regarding the case of Levi's jeans and Greening (1981/1984) with regard to the Florsheim shoes case.
[110] Lafferty *et al.* (1984: 12, 34, 35).
[111] This term is used by Lambert (2009: 1952).
[112] Lambert (2009: 1958) with reference to Elzinga and Mills (1988: 1848).
[113] See Telser (1960: 95).

that even with RPM the incentive to free ride remained), but more generally to compensate retailers for and enforce an increased service-level.[114] As such a broader role of contract enforcement and compensation can be played by RPM in any case of an incentive incompatibility between supplier and dealer that requires a contract enforcement mechanism, and not only where the source of the incompatibility is the horizontal externality of free riding, the model is not limited to free-rideable services.[115] Though initially not made very clear and thus famously rejected by *Breyer* in *Leegin* as incomprehensible, Klein (2009) clarified in response to *Breyer*[116] that such an incentive incompatibility between supplier and dealers exists with regard to services that lack significant inter-retailer demand effects. *Klein* argues that retailers will not have an adequate incentive to provide promotional services, where manufacturers earn greater profit margins than retailers on incremental sales and the retailers' smaller profit margin is not offset through significant inter-retailer demand effects from the supply of the services.[117] That manufacturers gain more from incremental sales than retailers

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[114] Klein and Murphy (1988: 266) ("Vertical restraints, by themselves, do not create a direct incentive for retailers to supply desired services. …. …. Even if the manufacturer fixes the retail price and does not permit price competition, retailers still have an incentive to free ride … ."); id. (1988: 266) ("… retailer may merely take the additional money created by the vertical restraint and continue to free ride"); see also id. (1988:285).

[115] Compare Klein (2009: 441) ("[RPM] does not merely eliminate the option for consumers to purchase a product at lower-priced retailers after receiving pre-sale services from full-service retailers; [RPM] is recognized to be an efficient way for manufacturers to pay retailers for supplying increased services, "free-rideable" or not.").
Similar Elzinga and Mills (2008: 1844) ("Klein and Murphy's important insight extends the role of RPM well beyond the case of a free-riding discounter.").
Also Elzinga and Mills (2008: 1844) ("RPM also may be used to induce efficient retail services when the source of market failure is not a free-riding discounter. Klein and Murphy interpret RPM not so much as a method to foil free riders but rather as a device to make retailers comply with incomplete performance contracts aimed at stimulating and securing retail services that build demand for the manufacturer's product.").

[116] Though Klein and Murphy (1988) already describe this incentive incompatibility, the absence of significant inter-retailer demand effects from the provision of promotional services, the most important condition of the model, is in their analysis only implicitly assumed (cf. on this Klein (2009: 444, Fn. 34)). It is made explicit in the much later articles of Klein and Wright (2007) and – in the aftermath of *Leegin* – Klein (2009) and (2009a).
Earlier related work on the incentive incompatibility due to a vertical externality and absent free riding includes Mathewson and Winter (1984), Winter (1993) (on the difference to Klein and Murphy (1988) (and the later work by Klein) see Klein (2009: 444-445, Fn. 34 and 455-456, Fn. 54) and Klein and Wright (2007: 428, Fn. 15)) and Mathewson and Winter (1998: 72-75).
The majority opinion in *Leegin* relies for the incentive incompatibility explanation absent free riding on Mathewson and Winter (1998) and Klein and Murphy (1988: 295) (*Leegin,* 127 S. Ct. at 2716);
Breyer rejects the explanation with the following often-cited passage (*Leegin,* 127 S. Ct. at 2733:

> "… I do not understand how, in the absence of free riding (and assuming competitiveness), an established producer would need [RPM]. Why, on these assumptions, would a dealer not "expand" its "market share" as best that dealer sees fit, obtaining appropriate payment from consumers in the process? There may be an answer to this question. But I have not seen it. And I do not think that we should place significant weight upon justifications that the parties do not explain with sufficient clarity for a generalist judge to understand."

[117] Klein (2009: 446-448). Klein (2009: 448-449) summarizes the model as follows:

> "In sum, given these economic factors commonly present in the marketplace – a significantly greater manufacturer profit margin than retailer profit margin on incremental sales, the absence of significant inter-retailer demand effects from retailer-supplied manufacturer-specific promotional efforts, and the "cannibalization" effects across brands sold by a multi-brand retailer in response to such promotional efforts – retailer often will not have the independent economic incentive to provide the level of manufacturer-specific promotional efforts that maximizes manufacturer profitability."

and thus a retailer's independent profit incentive to promote a particular manufacturer's products will be significantly less than the profit incentive of the manufacturer, is considered a given in case of branded products.[118] In the model this incentive incompatibility is not offset by inter-retailer demand effects, which is considered the more important condition of the model.[119] This is the case when the desired promotional efforts have primarily inter-brand effects and result in manufacturer "brand shifting".[120] The desired services induce some of the retailer's consumers to purchase the promoted product who would not otherwise do so, which is why the supplier desires them, but they do not increase the retailer's overall sales, because they do not induce consumers of other retailers to shift their purchases to the retailer, i.e. their provision does not influence the consumer's decision of where to shop,[121] they only shift the retailer's consumer purchases to the promoted brand away from other brands so that the promotion-induced increase in demand of one product will be offset by a decrease in sales of another product.[122] *Klein* points to two types of services that lack inter-retailer demand effects, namely positioning (prominent display) and brand-specific point-of-sale salesperson promotional efforts; the examples, he gives, are the prominent display of boxed (Russell Stover) candy and the salesperson assistance to buy clothing at a department store.[123]

2. Why RPM is the solution to the incentive incompatibility

Having answered the question of why a mechanism is needed to incentivize dealers to provide promotional services – free riding or, alternatively, the lack of inter-retailer demand effects, being the answer – the models must also explain why the compensation must be in the particular

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Wright (2009: 19) summarizes the economic conditions of the model: "manufacturer profit margins that exceed retailer profit margins on promotional incremental sales , the absence of significant inter-retailer demand effects from the supply of promotional effort, and promotion that results primarily in manufacturer "brand-shifting"

[118] Klein (2009: 24). Also Wright (2014: 13) ("This is highly likely to be the case where manufacturers product branded, differentiated goods and face substantially less elastic demand than retailers."). See also already Klein and Wright (2007: 425). More on this condition of the model below III.B.2.(b).

[119] Klein (2009: 444) („The **fundamental** economic reason manufacturers find it necessary to encourage retailers to supply more manufacturer-specific point-of-sale promotional services ist he absence of inter-retailer demand effects.").

[120] Klein (2009: 446-448). Klein (2009: 448-449) summarizes the model as follows:

> "In sum, given these economic factors commonly present in the marketplace – a significantly greater manufacturer profit margin than retailer profit margin on incremental sales, the absence of significant inter-retailer demand effects from retailer-supplied manufacturer-specific promotional efforts, and the "cannibalization" effects across brands sold by a multi-brand retailer in response to such promotional efforts – retailer often will not have the independent economic incentive to provide the level of manufacturer-specific promotional efforts that maximizes manufacturer profitability."

[121] Klein (2009: 17). But the services the model applies to do not have (significant) inter-demand retailer effects, i.e. they do not "influence ex ante consumer decisions regarding where to shop"

[122] Klein and Wright (2007: 425).

[123] Klein (2009: 441-442).

form of RPM. Are there no other, equally effective mechanisms that could provide the necessary incentives? Why not directly contract and pay for the desired services? Does RPM even work?

That suppliers use RPM because it is the most efficient mechanism to induce dealer services is a point, which the RPM models struggle to explain and which has made them vulnerable to critique; this is also an issue that is raised by defenders of the EU' strict stance.[124] Doubts arise because, and this is widely acknowledged, RPM alone cannot induce the desired services, neither in the case of services subject to free riding, nor in the case of services without inter-retailer demand effects; rather monitoring of not only retail prices, but also of retailer behavior (service performance), and then terminating retailers that fail to perform as expected is necessary to induce the desired services.[125] RPM's main role is to provide the dealer with an increased rent stream that increases the threat of contract termination in case of inadequate service provision, i.e. ensuring that termination has sufficient value as a threat[126] thereby "facilitating self-enforcement" and lowering monitoring costs.[127] This is considered to be less costly than directly contracting for the specific services in case of services that are difficult to specify and to monitor.[128]

B. The negative models

The prevailing view recognizes, what already *Bork* acknowledged, namely that the use of RPM in certain contexts may have anti-competitive, welfare-reducing effects, though this is found to

[124] For example Grippini-Fournier (2010: 526) argues that RPM cannot induce free-rideable services ("Since –by hypothesis- a dealer may free ride on other dealers' services, the rational, profit-maximizing dealer has every incentive not to incur the cost of the extra services. Instead, it can take advantage of the expanded demand brought about by other dealers' efforts."). What Grippini-Fournier does not take into account is the addition/clarification of the Telser model by Klein (on this below).
[125] On this see below chapter 3 section III.
[126] On this see e.g. Mathewson and Winter (1998: 74).
[127] See e.g. Klein (2009: 455) (RPM in order "that the manufacturer need not devote as much resources in monitoring retailers and that the manufacturer need not supply retailers with as large a profit premium stream in order to assure retailer performance").
"Facilitating self-enforcement" is the term Klein frequently uses to describe the role of RPM in inducing service provision. See e.g. Klein and Wright (2007: 428, Fn. 14) ("[RPM is] used to facilitate a self-enforcement mechanism by creating a retailer profit premium for retailers supplying the promotional services desired by the manufacturer, with manufacturers monitoring and terminating retailers that do not perform as desired"); Klein (2009: 455, Fn. 54).
[128] On the relative monitoring costs of RPM and more direct forms of contracting on and paying for services see for example Mathewson and Winter (1998: 74).
For an analysis of the relative costs of RPM versus other mechanism see below chapter 3 section III.B.

be the exception.[129] In these models, which predict negative effects on welfare, the manufacturer's willingness to effectually overpay retailers for distribution through RPM is explained not by the supplier's intention to increase sales through increasing efficiency, but as "an exercise of market power"[130]. The 'economic consensus' mostly pays attention to and includes in its analysis the two collusion-based models that also *Bork* already referred to. There are several other, newer models that are so far largely ignored by the 'economic consensus', which are only shortly mentioned here, but will not be included in main analysis of the empirical evidence below, as in this chapter the focus is put on the arguments of the 'economic consensus'.

1. Collusion-based models: facilitation of horizontal coordination

(a) RPM to facilitate a supplier cartel

A long recognized explanation for the supplier's desire to use RPM is that RPM may be used by colluding manufacturers to facilitate an upstream cartel.[131] Though facilitation can occur in several ways, the focus is usually put on RPM as a monitoring device that makes cheating more detectable.[132] As wholesale prices are not directly observable, the publicly observable retail prices can be used as indirect evidence; RPM gives the manufacturer the possibility to control and stabilize retail prices, which are affected not only by manufacturers' wholesale prices, but also by other stimuli (such as local shocks on demand and cost) making retail prices a more reliable indicator.[133]

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[129] See already Bork (1978/1993: 292-297); today Klein (2014: S174) acknowledging the need for "distinguishing between a retailer's demand for [RPM] that is an exercise of market power and a retailer's demand for resale price maintenance that is a demand for competitive compensation for the provision of its retailing services in connection with the sale of the manufacturer's products".

[130] Klein (2014: S174).

[131] This explanation has long been recognized informally, see e.g. Bork (1978/1993: 293-295); Posner (1981: 10); Telser (1960: 96-99).
More recently it has been formalized by Jullien and Rey (2007).

[132] Besides facilitating monitoring of deviation from the cartel, RPM is said to reduce the incentive to cheat, because the wholesale price reduction cannot be passed on to consumers and, thus, sales cannot be expanded. On this see already Telser (1960: 97). Also Lambert and Sykuta (2013: 4) ("[deviation] is less tempting if the cheater cannot expand sales to consumers through lower retail prices").
Jullien and Rey (2007: 991) show in their formal model that RPM may facilitate a cartel in two ways: 1. "RPM may allow for harsher punishments [], which can in turn enable the manufacturers to sustain a higher, more profitable price"; 2. RPM to facilitate detection (Jullien and Rey (2007: 992)).
See also Lambert (2009: 1946) with further references.

[133] Jullien and Rey (2007: 996). See also Mathewson and Winter (1998: 65).

(b) RPM to facilitate a dealer cartel

Another long-recognized explanation is that the manufacturer may be pressured into establishing a system of RPM by colluding retailers. The retailers in this explanation use the manufacturer to coordinate the retail prices in order to stabilize the retailer cartel.[134]

2. Negative models absent collusion

There are several models, which predict negative effects on welfare even in the absence of collusion. While the 'economic consensus' recognizes the first one, based on exclusion, but finds it to be rarely applicable, the remaining models are largely ignored by proponents of the 'economic consensus'.

(a) Exclusion

The manufacturer may use RPM in exchange for exclusion on the downstream level.[135] In this model a manufacturer with market power offers his dealers increased profits through RPM in an implicit exchange for their refusal to carry (or promote) the products of his (potential) competitors. RPM is used as a rent-sharing device, the dealers get to share in the supplier's through-exclusion-obtained supra-competitive profits.[136] This explanation has been the focus of

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[134] This constellation is sometimes referred to as "A to B to C" coordination (see e.g. Giovanetti and Stallibrass (2009: 645, Fn. 14); also OECD (2008: 206, Fn. 13).
Though it has been recognized for a long time (see e.g. Yamey (1954); Telser (1960); Bork (1978/1993: 292-293)), there is no formal model (as pointed out by OECD (2008: 206, Fn. 13).

[135] This (informal) explanation has long been recognized in the economic literature (see e.g. Yamey (1954: 22); Bowman (1955).
A formal model has been provided more recently by Asker and Bar-Isaac (2011).
Lambert (2010: 184) calls it "RPM-augmented foreclosure theory".
This explanation is the focus of the unpublished thesis by Paldor, in which he shows "that RPM is more likely to be used to induce exclusivity than it is to induce other services" and that "the kind of exclusivity RPM induces is the anti-competitive exclusivity" (Paldor (2007: 262)).
It has also been acknowledged by the majority opinion in *Leegin* ("A manufacturer with market power, by comparison, might use resale price maintenance to give retailers an incentive not to sell the products of smaller rivals or new entrants." *Leegin*, 127 S. Ct. at 2717).

[136] Asker and Bar-Isaac (2011: 3-4) ("The incumbent manufacturer, by an appropriate choice of RPM, can ensure that the industry as a whole earns the profits that a monopolized industry would earn, and, through an appropriate choice of the wholesale price, divide these profits between itself and the retail sector. To exclude entry, the incumbent must ensure that every retailer earns more than a competing manufacturer entrant could offer the retailer to stock its product: however, this may still allow the incumbent positive profits. Therefore, according to this theory, both the retail sector and the incumbent manufacturer gain from RPM.").

a more recent dissertation, which argues that this indeed is one of the main reasons for why RPM is generally anti-competitive.[137]

(b) Protecting upstream monopoly rents

Though largely unnoted by the 'prevailing view' it has been argued that RPM may be explained by a monopolistic supplier's intent to protect upstream monopoly rents through using RPM.[138] In this explanation RPM solves the supplier's commitment problem that hinders even a monopolistic supplier from exerting monopolistic profits, when vertical contracts are not publicly observed tempting the supplier to behave opportunistically and to agree in later contracts which is anticipated by its retailers.[139]

(c) RPM in interlocking relationship

There is a newer strand of models that explain the use of RPM in markets characterized by "interlocking relationships", i.e. by a situation in which suppliers distribute their products through the same competing retailers.[140] In these models RPM reduces the incentives to behave aggressively or to bargain for lower wholesale prices thereby dampening competition.[141]

C. Conclusion

The economic literature provides several explanations for the use of RPM, some of them predicting positive, others negative effects on welfare. These economic models concretize *Bork's* basic premise that the manufacturer's desire to use RPM can only (with the rare exception of a cartel-facilitating use of RPM) be explained with his intent to increase distributive efficiency, namely – and this is the concretization of the different positive models – through the inducement of unspecifiable demand-enhancing services.

The prevailing view or economic consensus acknowledges that both types of models are theoretically valid so that theoretically RPM may have either positive or negative effects on welfare depending on the circumstances.[142] In a next step it attempts to match the available

[137] See the in-depth analysis of the exclusion-based model by Paldor (2007: 240-295).
[138] Hart and Tirole (1990) and O'Brien and Shaffer (1992).
[139] For a brief description see Motta *et al.* (2009: 2).
[140] For the definition of 'interlocking relationships' see e.g. Rey and Vergé (2010: 930, 952).
Economic literature on RPM in interlocking relationships includes Rey and Vergé (2010); Rey and Vergé (2004); Rey and Vergé (2002); Dobson and Waterson (2007: 935-962).
[141] See Motta *et al.* (2009: 2) for a brief description with further references.
[142] See e.g. Economists Brief *Leegin* (2007: 16); Lambert and Sykuta (2013: 4).

models against the available real world data and shows that *Bork's* premise is consistent with real-world use of RPM.

III. The empirical evidence of the 'economic consensus'

The section looks at the evidence that has been cited by the 'economic consensus' with the aim of evaluating how strong the evidence truly is that RPM is most often benign. While the validity of both positive and negative models, and with it the conclusion that RPM may have either positive or negative effects, is entirely undisputed, the interpretation of the available evidence has led to diverging views on the relative significance of the available models. In an attempt to match the theoretical explanations with real world data, the 'economic consensus' concludes that based on the currently available evidence it can only be concluded that most cases of RPM can be explained with the positive models.[143] In contrast, the Commission is of the view that positive effects of RPM are unlikely and presumes it has negative effects.[144] As long as the 'economic consensus' can point to empirical studies to support its claim that RPM is most often benign, it will be difficult for the EU, in particular the Commission, to defend its presumptions. This is why it is so important to dissect the economic empirical literature that is cited by the 'economic consensus' and critically examine how strong the cited evidence truly is.

A. Methodology and structure of the analysis

This section dissects the evidence that the 'economic consensus' uses to support its claim that RPM is most often benign in terms of welfare effects.

This step of turning to real world data in order to test the explanatory power of the theoretical models, which like all models in science "do not reflect truth, but rather useful abstractions for explanation and prediction"[145], is part of the 'scientific method' that economics, which sees

[143] See e.g. Wright (2009: 22, 23); O'Brien (2008: 81).
[144] On this see above chapter 1 II.B.
[145] O'Brien (2008: 41, Fn. 1). Similar Bishop (2013: 72) points out that "[m]odels are not [] descriptions of reality", "[they] are metaphors that compare the object of their attention to something else that resembles it", but that "resemblance is always partial".

itself as an empirical science[146], follows. The 'winner of the battle' between competing models is picked based on consistency with the real world phenomenon the models seek to explain.[147]

In order to gain more clarity of the strength of the evidence cited in support of a less strict stance on RPM the section is organized based on the different types of empirical arguments used by the prevailing view. This means that this section examines the empirical material cited by the prevailing view by organizing the empirical material based on the empirical methods used.

The prevailing view examines and cites two different types of empirical studies. The first kind of empirical study, which may be termed 'incidence studies', examines the circumstances, under which RPM has been used, by looking at past observed incidences of RPM in order to determine ex post whether factors, which theory suggests are indicative for a specific model, have been present. The second kind of empirical study, which may be termed 'effects studies', estimates the effects or consequences of RPM on a measurable market variable (e.g. price, output, stock market returns), which may be used as a proxy for consumer welfare or firm value; from the estimated effects conclusions are drawn for the relative significance of the available theoretical RPM models.[148] In addition to examining empirical studies the prevailing view also (theoretically) estimates how often the conditions of the available models can be expected to occur in real world markets.

Though these three methods to match models to the real world phenomenon of RPM are often used combined,[149] for the sake of clarity and in order to be able to truly understand and be able to evaluate the available evidence's strength, the following sections look at each method in turn sorting all evidence that has been cited to support the claim that RPM is most often benign by method into the different categories.

Section B looks at "apparent likelihood" arguments, which have been raised in support of the claim that RPM is most often benign in particular by *Lambert*.

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[146] Economics thus falls into Popper's definition of 'science', compare Popper (2002) (a theory must be empirically falsifiable to be scientific). We will see later though that due to methodological limitations its empirics are not as rigorous as in the natural sciences, which is why economics is often said to be not a 'hard science', not an 'exact science' (see e.g. Bishop (2013: 72).

[147] O'Brien (2008: 42-43). See also Stigler (1992).
Also Wright (2009: 23) on how this 'scientific method' should also be used by policy-makers.

[148] On the distinction between *incidence* and *effects* studies see Lafontaine and Slade (2000: 400).
Some empirical studies combine evidence on incidence with evidence on effects of RPM (see e.g. Hersch (1994)). For the sake of clarity and be able to analysis the solidity of evidence the two are separated in the following analysis.

[149] For example Hersch (1994) combines incidence with effects study.

Section C examines the incidence studies frequently cited, in particular those included in Overstreet (1983), Ippolito (1988; 1991) and Ornstein (1985).[150]

Section D examines the frequently cited effects studies of Cooper et al. (2005a; 2005), Lafontaine and Slade (2008) and Overstreet (1983), though, as seen below, it will have to be considered that the cited studies themselves are 'survey studies', i.e. they survey a sample of individual effects studies.

It should be noted here that the economists behind what has been termed the 'economic consensus' or 'prevailing view' differ in their use of and reliance on empirical data; for example the 'apparent likelihood' estimate is widely used and relied on by many economists, also in the earlier literature; in contrast *Wright* for example only cites the (in his view) 'recent' effects studies; the majority opinion in *Leegin* cites both 'effects' and 'incidence' studies etc.[151] Nevertheless, it is always the same empirical material that is cited again and again in support of the economic consensus view that RPM is most often benign.

B. 'Apparent likelihood' / 'Reasonableness' of the models' conditions

The first argument, the economic consensus uses to support the position that RPM is almost always benign, is based on the "apparent likelihood" or "reasonableness" of the factual conditions of the different RPM models.[152] As each model (and the effects it predicts) is plausible only under certain conditions, a potential effect's likelihood can be estimated by assessing the probability that its factual prerequisites will be satisfied.[153] No actual empirical data (in the sense of systematically collected data) is used here; rather it is looked at what is apparent, what is reasonable to expect about the factual conditions, if one turns from the theoretical models to actual real world markets. Such theoretical assessment is used as

[150] See for example Lambert (2010: 186), Lambert and Sykuta (2013: 3, 5-6) and Wright (2014: 16), who in addition cites the 'effects studies' discussed below.
The majority opinion in *Leegin Creative Leather Products v. PSKS*, 551 U.S. 877, 894 (2007) cites Overstreet (1983: 170, 80) and Ippolito (1991: 292).
For a similar, but slightly different, claim OECD 2008 (US contribution) (219-220) ("The available empirical evidence does not support a conclusion that RPM is widely used to support the operation of price-fixing cartels.") discussing Overstreet (1983), Ippolito (1991) and in addition Ippolito and Overstreet (1996).
[151] *Leegin Creative Leather Products v. PSKS*, 551 U.S. 877, 894 (2007).
[152] Lambert (2010: 185) uses the term 'apparent likelihood' for this type of analysis; O'Brien (2008: 44) speaks of "the reasonableness of the assumptions that form the basis of the theory".
[153] Lambert (2010: 181).

evidence[154] in addition to and often in combination with actual (collected) empirical evidence. It is found to be a useful tool, as in economics empirical data is often quite limited, in particular due to its dependence on natural experiments.[155]

The focus in this type of analysis is usually put on the negative models, whose conditions are found to be very unlikely to be fulfilled in real world markets; but also an estimation of the reasonableness of the conditions of the positive models can be found. Below we look at each in turn.

1. Apparent likelihood of negative models

With regard to the 'apparent likelihood' of the factual conditions of the negative models to occur on real world markets the verdict of the 'prevailing view' is clear; it is posited by *Lambert* and *Sykuta* for example that "[t]he "stars must align" in order for any of the theoretical anticompetitive harms of RPM to materialize"[156], others speak of the "uncommon" or "narrow sets of circumstances" under which the negative models conditions occur.[157] This conclusion is reached based mainly on an analysis of the conditions of the two collusion-based RPM models, but also the likelihood of the exclusion-based model is estimated, and justified as follows.

(a) Upstream collusion

That it is reasonable to assume that RPM is very unlikely to be used to facilitate a supplier cartel is argued by pointing out the following narrow conditions of the model.

RPM as a means to facilitate a supplier cartel is only plausible, where the market conditions are such that a cartel is practicable, i.e. can successfully operate on the market. This is found to require a concentrated market, a fairly standardized product and entry barriers. In addition to

[154] Compare for example O'Brien (2008: 44): "A second type of **evidence** relates to the *reasonableness* of the assumption that form the basis of the theory." (bold emphasis added).
[155] See e.g. O'Brien (2008: 43) noting that "[w]hile consistency of theory with evidence is paramount, it must be admitted that this principle is harder to apply in economics than in some of the better-developed physical sciences"; he argues while the "reasonableness of the assumptions" is as "criterion less objective than good empirical evidence because it may not be obvious which assumption is most reasonable", "when the only theories available for decision-making have not been convincingly distinguished by empirical work, the reasonableness criterion seems useful".
[156] Lambert and Sykuta (2013: 4).
[157] Lambert (2010: 181). Similar Economists Brief Leegin (2007: 13, 15); OECD US contribution (2008: 218).

the market needing to be susceptible to cartelization, RPM must be used so widely that it can actually assist with the collusion; and it must be necessary for monitoring compliance, as it is quite costly for the manufacturer, who in effect overpays his retailers through RPM.[158] It is also pointed out that, as cartels work best for homogenous products, but RPM is observed primarily in case of differentiated products, the likelihood of RPM being used to facilitate a supplier cartel is very low.[159]

(b) Downstream collusion

The factual conditions of the dealer cartel model are found to be even narrower than those of the supplier cartel model.

It is pointed out that, similar to the above, cartelization must be an option for dealers, i.e. the market must be susceptible to cartelization; and that this is not the case, if consumers can switch to other brands not encumbered by collusive retailer margins. Thus unless either the manufacturer of the product has market power or RPM is used by many or most manufacturers in the market, dealers will not seek the policy. In addition, and again similar to the supplier cartel model conditions, RPM must be necessary for monitoring, which may not often be the case as retail prices are often directly observable.[160] In addition to the condition that dealers must seek the policy, which is similar to that for the supplier cartel explanation, the supplier must comply with the dealers' request, which makes the dealer model even more improbable than the supplier cartel model. Usually the supplier has no incentive to comply with the dealers' request, as with RPM he is in effect overpaying his dealers; he may agree only if he lacks alternative means of distributing its products, which is the case only if there are no sufficient alternative distribution outlets and forward integration into distribution is not a feasible option, as he otherwise will reject the dealers' request.[161]

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[158] Lambert (2010: 186); Lambert and Sykuta (2013: 4); Economists Brief Leegin (2007: 13-14).
On the prerequisites for successful collusion more generally see e.g. Bork (1978/1993: 293-295); Stigler (1964); Posner (); Hovenkamp.

[159] Elzinga and Mills (2008: 1847) explain that "[p]roduct differentiation engenders all kinds of nonprice competition among the cartel members that would be difficult for a cartel to squash, especially in an environment where contracts cannot be enforced in a court of law. On the low likelihood that RPM is used to facilitate a supplier cartel in case of differentiated products see already Bork (1978/1993: 293).

[160] Lambert (2010: 182); Economists Brief Leegin (2007: 15).

[161] Economists Brief Leegin (2007: 15); Lambert (2010: 182); Lambert and Sykuta (2013: 4).

(c) Exclusion

While the focus is usually put on the analysis of the collusive RPM models, and often only those are discussed, *Lambert* also examines the exclusion-based RPM model, in which the manufacturer uses RPM as a rent-sharing mechanism to induce dealers to exclude its rivals. *Lambert* argues that this would only be possible under two conditions, which will rarely be fulfilled on real world markets. First, the through RPM guaranteed retail margin must be large enough for retailers to not carry or not promote the products of the manufacturer's competitors and, second, RPM must extend so broadly that it generates significant foreclosure (i.e. there are sufficient alternative distribution outlets for the rivals left).[162]

2. Apparent likelihood of positive models

Examining the relevance of the available positive models through an apparent likelihood/reasonableness standard defenders of RPM posit that the conditions of the positive models are frequently fulfilled, in particular compared to the narrow conditions of the negative models.[163]

Though *Lambert* for example makes the more general, unspecified argument that the various conditions of the different positive models, taken together, are frequently fulfilled in real world markets – he simply lists the conditions of the free riding models (Telser; quality certification; new entrant model) and also the demand uncertainty model and concludes that "these various conditions quite often exist"[164] – others have put the main focus primarily on the Klein model and even conceded that the conditions of the free rider models and the demand uncertainty model are quite narrow.

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[162] Lambert and Sykuta (2013: 5); Lambert (2010: 10). See also Elzinga and Mills (2008: 7) (arguing that the exclusion model "cannot apply where manufacturing competitors and entrants retain access to the market via competing retailers or alternative channels of distribution. Nor can it apply where the manufacturer using RPM does not control a large share of the relevant market in spite of using this practice.").
On the rare occurrence of the conditions for dealer-initiated exclusion see Lambert (2010: 183-184), Lambert and Sykuta (2013: 5) "To succeed as an exclusionary device by which a dominant retailer squelches competition form more efficient rivals, RPM policies must be implemented on such a large proportion of the brands carried by the more efficient retailers that they cannot gain an effective foothold in the retailer market."

[163] See for example Lambert (2010: 185).

[164] Lambert (2010: 185).

(a) The free riding models and demand uncertainty

In view of the debate on RPM, in which the free riding models are again and again discussed at length and even found their way into the Commission's *Vertical Guidelines* and are often considered the primary economic justification of RPM,[165] it is surprising to note that in the economic literature the proponents of the position that RPM is almost always benign concede that the conditions of these models are very narrow.

Both, *Klein* and *Wright*, have noted the "overuse" of the Telser model that they find has led to "absurd, clearly pretextual explanations";[166] they echo the early critique on the model that it can only explain the use of RPM in case of information-sensitive costly consumer durables, which was the very reason why the Klein model was developed.

It is similarly conceded that the quality certification model of *Marvel* and *McCafferty* "does not explain most examples of [RPM]" as it does not apply when the product has a well-established brand.[167] And also the demand uncertainty model is found to be only rarely (if ever) applicable, if real world market conditions are taken into account, because it can be observed that "contrary [to the assumption of the model] manufacturers commonly induce retailers to hold increased inventories by subsidizing the financing of inventories, instituting liberal return policies, or providing wholesale price refunds for unsold products"[168].

(b) The Klein model / the 'contract enforcement model'

The focus of the prevailing view is set on the Klein model, which explains the use of RPM as a means to induce demand-enhancing dealer services in the absence of free riding.

It is repeatedly stressed by the prevailing view how fundamental it is to understand that dealers even in the absence of free riding will not have sufficient incentives to adequately promote the supplier's product, for which the Klein model provides the explanation.[169] As the model does not depend on the occurrence of inter-retailer free riding, it is not limited to products whose sales crucially depend on dealer services that are subject to free riding and for which it is worth for consumers to visit a second dealer. This seems to have led to the assumption that the Klein

[165] Peeperkorn (2008: 208); Bundeskartellamt, Contribution to OECD (2008: 144); American Antitrust Institute (2009: 12).
[166] Wright (2009: 16,17); Klein (2009: 433).
[167] Klein (2009: 434).
[168] Klein (2014: S168).
[169] See e.g. Klein (2014: S164) considering the explanation of RPM in the absence of free riding through the contract enforcement model "[a] primary advance in the economics of resale price maintenance since the publication of *The Antitrust Paradox*" (original emphasis).

model can cover the many cases that do not fall under the narrow free rider theories, that the model is "broadly applicable … in the absence of free-riding"[170].

In particular, the Klein model's condition that there is an incentive incompatibility between supplier and dealer as consequence of the supplier earning more on incremental sales than retailers is found to be a frequent occurrence in real-world markets,[171] in particular in branded-good markets.[172] This is justified by *Klein* as follows.

It is primarily argued that the condition of the Klein model that manufacturers earn greater incremental profits than dealers and that thus an incentive compatibility exists can often be found in real world markets. *Klein* explains that "[t]he greater profit margin earned by manufacturers compared to retailers on incremental sales of the manufacturer's products [] is a consequence of the fact that manufacturers often produce goods that are more highly differentiated than retailing services"[173]. As "retailers frequently sell the same products [they] often face highly elastic demands"; in contrast "manufacturers of highly advertised, well-known products with established brand names, generally sell more highly differentiated products and consequently face substantially less elastic demands than retailers"[174]. "Therefore, manufacturers **often** price their products above marginal cost and earn a greater incremental profit margin than retailers"[175], which is the condition for an incentive compatibility to exist.

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[170] Klein (2009: 437) for example considers his model to be "a **broadly applicable**, procompetitive rationale for [RPM] in the absence of free-riding", (emphasis added).
See also Klein (2014: S168) arguing that "[**m**]**any cases** of [RPM] can be explained in this context not in terms of the prevention of free riding but as the efficient way a manufacturer pays for effective retail distribution." (emphasis added).
See also Elzinga and Mills (2008: 1844) ("Klein and Murphy's important insight extends the role of RPM well beyond the case of a free-riding discounter.").
The importance of the Klein model as basis for the 'prevailing view' is also reflected in OECD (US contribution) (2008: 215) ("An important point that is relevant to policy discussions is that the retailer services need not be subject to free riding for RPM to be a profitable and consumer welfare-enhancing strategy."); Klein (2014: S164) ("A primary advance in the economics of [RPM] since the publication of The Antitrust Paradox involves the analysis of why manufacturers commonly adopt [RPM] when there is no free riding.").
Also proponents of the opposite view (i.e. the position that RPM is frequently anti-competitive) find Klein's incompatibility theory to be widely applicable, see in particular Grimes (2008: 188; 2010: 104, 107); Grimes argues that the model leads to negative effects on welfare (on this below chapter 3 II.D.6.).
[171] See e.g. Klein (2009: 40-41) : "Given the fundamental incentive incompatibility that **frequently** exists between the manufacturer and its retailers with regard to point-of-sale retailer promotional efforts, … manufacturers will **often** find it in their interests to use [RPM] to compensate retailers for promoting their products." (emphasis added).
[172] See e.g. Wright (2014: 13) ("This is highly likely to be the case where manufacturers produce branded, differentiated goods and face substantially less elastic demand than retailers.").
[173] Klein (2009: 446).
[174] Klein (2009: 446).
[175] Klein (2009: 446) (emphasis added).

In addition, it is pointed out that in particular in case of branded products with high intellectual property content (perfumes, CDs and computer software are given as example), manufacturers will earn significantly larger profit margins on incremental sales than retailer, because these are products, where the marginal cost of producing an additional unit is low relative to the wholesale price and which are found to "have a higher ratio of fixed to marginal cost than is typical for retailing services"[176].

The second condition that must be present, namely that the incentive incompatibility, which it is shown will exist in case of branded goods, is not offset by inter-retailer demand effects, which is considered the more important condition of the model[177], is not examined as to whether it is frequently fulfilled on real world markets. *Wright* for example merely notes in a footnote that "these large inter-retailer demand effects are not likely to be present for many desired services, such as the provision of premium shelf space"[178]. That premium shelf space, his main example for a service that lacks inter-retailer demand effects, does not fulfill another condition of the Klein model, namely that the service must be difficult-to-specify, something *Wright* himself points out in a different context,[179] is ignored.

3. Evaluation

As described above when attempting to estimate how reasonable it is to assume the conditions of the available models to be present in real world markets, the prevailing view finds that the conditions of the negative models are much less likely to be fulfilled than those of the positive models.

With regard to the negative models the prevailing view can point to the long-established finding that the conditions of the collusion-based models are quite rare, mainly because cartels are feasible only under a very narrow set of circumstances. Importantly, these conditions will not be satisfied in branded goods markets, which is the main field today where manufacturer desire

[176] Klein (2009: 446) with reference to Klein and Murphy (1988: 283-284).
[177] Klein (2009: 444) („The **fundamental** economic reason manufacturers find it necessary to encourage retailers to supply more manufacturer-specific point-of-sale promotional services is the absence of inter-retailer demand effects.").
[178] Wright (2014: 13, Fn. 28).
[179] Klein and Murphy (2007: 428, Fn. 15) concede that "assuring retailer performance of shelf space contracts usually does not require a significant retailer profit premium above the opportunity cost of shelf space because it is easy for manufacturers to detect retailer nonperformance".

to use RPM.[180] What must be pointed out though is that the prevailing view ignores several more recent models, which establish explanations for RPM that predict negative effects, in particular where RPM is used to solve a commitment problem or in interlocking relationships. An argument that the conditions of these models are unlikely to be fulfilled on real world markets has not been made by defenders of RPM and the possibility that these models frequently explain the use of RPM, as defenders of the EU's strict stance may argue,[181] has not been refuted.

With regard to the positive models, it is interesting to note that the prevailing view appears to be focusing on the Klein model, which, as it is not limited to the occurrence of free riding, is considered to be broadly applicable, covering the many cases that the free riding models cannot cover. That the narrowness of the free rider models' applicability is acknowledged also by the economic consensus view is notable, as in the debate on the policy implications for RPM the free rider models and their probability play an important role and are often even considered the primary efficiency explanation, while the Klein model has not been mentioned by either the Commission or for example the Bundeskartellamt.[182] The economic consensus is able to convincingly show that one can assume the incentive incompatibility, which is a condition for the model, to exist in case of branded goods, in particular branded goods with intellectual property content. What is striking though is that the condition of the Klein model that the incentive incompatibility must not be offset through inter-retailer demand effects is not looked at, although it is found to be a fundamental condition of the model.

More generally, it must be noted that there is no systematic discussion of all the conditions, which are required to be satisfied, if the positive models were to apply. That RPM is needed as 'contract enforcement mechanism' is only the case for services, which not only must be either free-rideable or lack inter-retailer demand effects, but which at the same time must also increase sales, must be necessarily provided at the point of sale by the dealer, and must be difficult-to-specify. The lack of systematic consideration of all necessary conditions is reflected in the above cited Wright example; though there may be services that lack inter-retailer demand effects, *Wright* points to shelf space here, this is not sufficient for the model to apply; the services must at the same time be difficult-to-specify, which for shelf space is not the case. In

[180] Compare chapter 4 II.C.
[181] Mestmäcker and Schweitzer (2014: 325, §12 para. 18) refer to this newer literature suggesting that the material shows that RPM is most often harmful, but there is no in-depth analysis.
[182] Bundeskartellamt, Contribution to OECD (2008: 144); American Antitrust Institute (2009: 12). See also Peeperkorn (2008: 208).

order to provide convincing evidence based on the reasonableness standard with regard to the consistence of the positive model with real world markets, all conditions would have to be considered.

Overall, the prevailing view does not provide convincing evidence on the frequency of the positive models based on the reasonableness of conditions examination, but can only convincingly show the infrequency of the negative models of collusion and exclusion.

C. Empirical evidence on the *incidence* of RPM ('incidence studies')

In addition to examining the 'reasonableness' or 'apparent likelihood' of the models' conditions the prevailing view also looks at systematically collected empirical data and its interpretation.

The first type of empirical studies cited by the prevailing view in support of its position are what may be termed 'incidence studies'. 'Incidence studies' examine the *incidence* of RPM, i.e. they seek to determine the circumstances under which RPM is (or rather has been) used in order to match the empirically observed variables with the conditions stipulated by the theoretical models.[183]

Frequently cited in support of the position that RPM is most often benign are the studies of Overstreet (1983) and Ippolito (1988; 1991), sometimes also Ornstein (1985) is cited[184]; the majority opinion in *Leegin* for example cites *Overstreet* and *Ippolito* as evidence that efficient uses are not infrequent[185].

Below we take a closer look at each of these studies.

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[183] Compare Lafontaine and Slade (2008: 400) who distinguishes this type of 'incidence study' from studies on the effects or consequences of vertical restraints.
For a similar distinction see Kretschmer (2011: 7-8) ("the studies either try to derive conclusions by means of (plausible) stock market effects of complaints [= 'effects studies'], or by examinations of past decisions (given by a sample of cases or single case decisions), which provide for a very heterogeneous sample of studies [= 'incidence studies']").
On 'effects studies' see below III.D.

[184] See for example Lambert (2010: 186), who in addition refers to Ornstein (1985) (but only in a footnote); Lambert and Sykuta (2013: 3, 5-6). Also Wright (2014: 16) who in addition cites the 'effects studies' discussed below (III.D.).
For a similar, but slightly different, claim OECD 2008 (US contribution) (219-220) ("The available empirical evidence does not support a conclusion that RPM is widely used to support the operation of price-fixing cartels.") discussing Overstreet (1983), Ippolito (1991) and in addition Ippolito and Overstreet (1996).

[185] *Leegin Creative Leather Products v. PSKS*, 551 U.S. 877, 894 (2007) citing Overstreet (1983: 170, 80) and Ippolito (1991: 292).

1. Overstreet (1983)

In his 1983 study *Overstreet* tests the two collusion-based RPM models.

Overstreet examines 68 FTC RPM cases from mid-1965 through 1982; he attempts to determine the size of the firms using RPM[186], the structure of the manufacturer market[187] and of the dealer market[188] in each of the cases.[189] Based on the observed economic conditions *Overstreet* concludes that both, the supplier cartel and dealer cartel explanation, are uncommon:

From the low concentration ratio in manufacturing market (in part combined with firm size)[190] and from the conclusion that RPM is used in markets of all types of structures, not particularly often in concentrated markets[191], *Overstreet* concludes that RPM is not frequently used to facilitate manufacturer collusion[192].

From the low dealer concentration in most cases, there were more than 200 resellers in over 80% of the 47 cases in which dealer concentration could be determined, *Overstreet* concludes that RPM is not frequently linked to dealer collusion[193].

2. Ippolito (1988; 1991)[194]

In contrast to *Overstreet Ippolito* tests not only the collusion-based RPM explanations, but in addition also looks for factors, which are indicative for the positive models of RPM, in

[186] Overstreet (1983: 68-71).
[187] Overstreet (1983: 71-79).
[188] Overstreet (1983: 80).
[189] The examination of FTC RPM cases is only one part of the broad report prepared by Overstreet (1983: 63-105). Also included in the report is a survey of existing empirical studies, among them mostly 'effects studies' (price surveys) but also a few incidence studies though only singular cases (which Overstreet considers "not "empirical" in the sense that extensive data were collected for rigorous hypothesis testing" (119).
[190] Overstreet (1983: 78).
[191] Overstreet (1983: 81).
[192] Overstreet (1983: 81) concludes that "[i]t is unlikely that there is effective manufacturer coordination featuring RPM in all or even most of these markets".
[193] Overstreet (1983: 80).
[194] The Ippolito study is published in two different versions, the actual study (long version) (Ippolito 1988) and a shorter summary (Ippolito 1991); most often only the short summary is referred to.

particular the free riding models and then compares the incidence of positive and negative models.

(a) Collusion-based RPM models

Ippolito examines all 203 reported FTC cases concerning RPM from 1975 through 1982 collecting extensive data on each of the cases[195], then focusing the analysis on the 153 cases in which RPM is voluntarily adopted[196] and determining the presence of two factors: the existence of allegations of collusion and the type of product concerned. Hypothesizing that, as horizontal price-fixing is a per se offense, "if the plaintiff had any evidence that the practice at issue in the litigation was used to support collusion, we would expect to see horizontal price-fixing allegations in these cases, in addition to the RPM allegation"[197], *Ippolito* uses the presence of allegations of collusion as an indicator for the existence of collusion. Ippolito finds that in 13.1% of the 153 cases allegations of collusion were present, allegations of supplier collusion in 5.9% and dealer collusion in 7.2%.[198] *Ippolito* concludes from these numbers that "there is little evidence … that collusion is the primary reason for the use of RPM"[199].

(b) The free riding models

Ippolito also examines which type of product the cases concerned; she determines in how many cases certain types of products were at issue, which she assumes to point towards / be an indicator for the applicability of the free rider theories; "complex" products in the (narrow) sense of "products for which quality and use information were nontrivial issues prior to

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[195] Ippolito (1991: 267). *Ippolito* attempted to determine the following factors in each of the cases: "data on the nature of the vertical price-fixing charge, whether the charge involved maximum or minimum RPM or both, whether state regulations were involved, other vertical restraint allegations, other antitrust charges, whether contract violations were alleged, the initial judgments and any appeal decisions, whether consents or summary judgments were issued, whether efficiency defenses were offered, the legal standard articulated in the case, whether the case was brought in state or federal court and the circuit, the year of the initial opinion, who brought the case, the type of distribution system used by the manufacturer, and the type of product. In addition, any allegations of horizontal collusion at the dealer or manufacturer level were recorded, as were any parallel cases that might indicate collusion."

[196] The study looks at all 203 reported FTC RPM cases, but then focuses on the subsample of the 153 cases regarding voluntarily adopted minimum RPM cases excluding maximum RPM and state-regulated RPM cases. On this see Ippolito (1988: 38).

[197] Ippolito (1991: 281).

[198] These are the percentages for the entire sample of cases. In the sample of private cases there are allegations of dealer collusion in 4.9%, allegations of supplier collusion in 4.9%, allegations of any horizontal collusion in 9.8%. In the government cases there were allegations of dealer collusion in 9.9 %, allegations of supplier collusion in 7.0%, allegations of any horizontal collusion in 13.1%. Cf. Table Ippolito 1991, 282.

[199] Ippolito (1991: 281). Similar also Ippolito (1991: 292) ("The evidence suggests that the collusion theories do not seem capable of explaining at least 85 percent of the cases …").

purchase"; " "simple" products that might fit the fashion and quality certification version of the theory"; "infrequently purchased products that changed over time" or new entrants are found to be the product categories for which free rider theories are plausible[200]. Based on the estimation that these types of products taken together were at issue in 65% of the private case sample and 68% in the government cases *Ippolito* concludes that the free rider theories have "the potential to be a major explanation for RPM-type practices"[201].

Comparing the result on the potential applicability of the free rider theories to that reached with regard to the collusive theories *Ippolito* concludes that the evidence suggests "that collusion is [not] the primary explanation for [RPM]" while "[the free rider theories] taken together, appear to have greater potential to explain the practices"[202].

3. Ornstein (1985)

There is a third 'incidence' study, though rarely cited, namely only by *Lambert* once in a footnote[203]. Ornstein only tests the supplier-cartel hypothesis finding that it could have been applicable in only 4 – 31 % of the cases.[204]

4. Analysis

The 'incidence studies', on which the prevailing view relies, look at the collusion-based RPM models; to a smaller extent also on the free riding models.

If we consider the following limits and shortcomings of the studies, this data can hardly be called "overwhelming evidence" that the positive models can *frequently* and the negative models *rarely* explain the use of RPM in real world markets.

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[200] Ippolito (1991: 283).
[201] Ippolito (1991: 285). For numbers/percentage Ippolito (1991: 283), overview in tables (284 and 285).
[202] Ippolito (1991: 291-292). Also Ippolito (1991: 282) ("if [the sample] is representative of the reasons for RPM's use, this evidence also suggests that noncollusive uses are far more common than collusive uses") and Ippolito (1991: 292-293) ("if [] the sample … is representative of the reasons for the use of RPM-type practices, [] the collusion theories appear to be a relatively minor explanation for RPM-type practices overall when compared to the agency theories").
[203] Lambert (2010: Fn. 69). For a critique on that study see Areeda and Hovenkamp (2004: 1606f, 91).
[204] Ornstein (1985).

(a) Methodological limitations of the 'incidence studies'

(i) Selection bias

What must be first noted is that both 'incidence studies' (*Ippolito's* and *Overstreet's*) attempt to make claims with regard to the reasons for the use of RPM in general, *Ippolito* that the positive models are more common than the negative models, *Overstreet* that the negative models are uncommon.[205] These general claims are based on the examination of past cases, in particular of published cases of prosecuted RPM. The general claims, both attempt to make, can only be made if the selected case sample of past published RPM cases is representative for the use of RPM in general, as *Ippolito* herself points out. While both, *Ippolito* and *Overstreet*, consider their case sample to be representative,[206] others have doubted this position, arguing that "because of the dynamics of case selection in litigation under the per se rule, cases with strong RPM evidence tended to settle, meaning the litigation sample represented disproportionately weak cases"[207].

(ii) Limited plausibility of link between observed factor and applicable model

The 'incidence studies' conclude from the presence of one economic factor to the applicability of the model. Due to data constraints the data observed/available may not be such a strong indicator for the applicability of the model, i.e. the data relied on may not be sufficient to determine rigorously whether the tested model is applicable in the examined case. Both, *Ippolito* and *Overstreet*, are aware of this limitation; *Ippolito* herself finds the tests used to be of "limited plausibility" and "weak"; *Overstreet* discusses the data constraints he faced which

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[205] For the studies' conclusion cf. above III.C.1 (Overstreet) and III.C.2 (Ippolito).

[206] Ippolito (1991: 281) speaks of "the apparently reasonable assumption that the sample of [] cases is statistically independent of the reason for the RPM's use". See also Ippolito (1991: 293) („Theory suggests (and the evidence from RPM cases supports the view) that litigated cases are a selected sample of all uses"). Ippolito discusses the issue of the case sample being representative at 271-278.
Overstreet (1983: 81) ("… the structural "snapshot" from the 1950's, comparing fair-trade markets to all manufacturing markets, combined without finding that recent FTC RPM cases have involved markets which structurally are distributed in about the same way as are all manufacturing markets, suggests that the FTC case sample may provide a fairly reasonable basis for drawing some limited general conclusions.").

[207] Tor and Rinner (2011: 816-7).
Being aware of the issue *Ippolito* herself limits her conclusions regarding frequency of models by adding the condition of the case sample needing to be representative. See e.g. (Ippolito 1991: 282) (" … if either the private-case sample or the combined private and government case sample are reasonable representative of the reasons for RPM's use, these findings also suggest that the principal-agent theories of RPM … have greater potential to be the major explanations for the use of RPM"); id., 292-293 (adding the same condition).

hindered him to "determine rigorously whether the associated economic conditions correspond best [to the tested models]"[208].

In particular:

Ippolito's equation of the plaintiffs' failure to allege collusion with the absence of collusion has been criticized as it "overlooks the superfluous nature of allegations of horizontal collusion in a [RPM] case and the tacit form that such collusion might take"[209]. This critique implies that collusion, and, thus, the collusive theories as explanation of the use of RPM, may have been an issue in more cases than the Ippolito study suggests.

Ippolito tests the Telser and the new entrant model based on data on the complexity (and newness) of the product, which she uses as substitute for data on "the value of prepurchase information to consumers"[210]. But from the presence of this one factor alone it cannot be concluded with certainty that the tested model applied, at best it shows that the free riding models could not be ruled out in the cases in which the tested factor was present.[211] Free riding may for example not be an issue even in cases of complex or new products, because the product's value is too low for it to be worth for the consumer to first get the information at one outlet before purchasing it at another; or there may be alternative means available to the supplier to provide the consumer with the desired pre-sale information that do not involve the dealer at the point-of-sale. In order for the studies to be able to confirm the applicability of the models, they would have had to examine all necessary factors.

Even the authors of the studies themselves suggest that the link between the one factor tested and the claim that a particular model is applicable is quite weak. And it is true - what does it

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[208] Ippolito (1991: 293) [..] ("This study is based on admittedly limited plausibility tests of the various theories of RPM") and speaks of "weak tests".). Ippolito (1991: 283) finds the type of product at issue in the cases to be a substitute for "the value of prepurchase information to consumers", which she considers to be indicative for the application of the free rider theories.
Overstreet (1983: 66-67) discusses data constraints, noting in particular that the case records "generally contain only limited information concerning the scope of particular RPM programs and the extent to which they were enforced" (id, at 66) and that most filed had "no description of the RPM practices of competitors" (id, at 67).
He complains that "[s]ome of the most basic economic variables, which theory suggests are relevant to discriminating among various hypotheses of the causes and effects of RPM, frequently are not available in the case records" such as e.g. profitability (as indicator of the successful exercise of market power), pricing practices of rival firms in an industry as examples or advertising expenditures. He concludes that the information used was generally "inadequate to determine rigorously whether the associated economic conditions correspond best with procompetitive or anticompetitive hypotheses about the use of RPM" (id, at 66).

[209] Breyer for the minority opinion in *Leegin Creative Leather Products v. PSKS,* 551 U.S. 877, 920 (2007) with reference to Hovenkamp (2005: §11.3c, p. 464, n. 19).

[210] Ippolito (1991: 283).

[211] Similar Brunell (2007: 509-510) ("This can hardly be described as "evidence" that free riding was involved in any of these cases; at most it suggests that free riding could not be ruled out.").

really show that in past RPM decisions a high percentage of cases involved complex products, while in only a low percentage of cases allegations of collusion were made or the concentration in many markets was low? This is in particular relevant where the evidence is used to show that a model frequently applies, as the presence of one factor cannot tell us anything about the presence of the other factors and thus cannot convincingly show the applicability of the model. With regard to the negative models, whose infrequency is part of the economic consensus' position, examining just one factor may be sufficient to look at where the presence of that one factor excludes the model's applicability. *Overstreet's* use of concentration ratio as indicator for the non-applicability of the collusion-based models is for example a stronger indicator than Ippolito's 'complex product' factor for the applicability of the Telser model.

(iii) Test of only some of the models

The 'incidence studies' do not test all of the available RPM models, i.e. they look only for factors that are indicative of specific models.

In particular with regard to the negative models it must be noted that only the collusion-based theories are tested; whether there were factors present in the cases that are indicative for the exclusion-, commitment- or interlocking relationship explanations, which also predict negative effects on welfare, (or "whether dealer pressure without collusion might have accounted for any of the instances of [RPM]"[212]), was not determined; the evidence thus is clearly quite limited, as even *Lambert* concedes.[213]

With regard to the positive models it must be noted that there is no data on the Klein model; but it is the Klein model that the 'prevailing view' finds most broadly applicable as seen in the 'apparent likelihood' discussion.

(iv) Theoretical validity of the models not tested

The empirical evidence gathered in the cited incidence studies is only as good as the theoretical models whose frequency they test. The incidence studies gather evidence on the presence of the

[212] Brunell (2007: 511).
[213] Lambert (2010:189-190) („This evidence is admittedly limited. Because the then-existing theories of anticompetitive harm stemming from RPM focused primarily on the practice's potential to facilitate collusion, the Overstreet and Ippolito studies did not investigate the incidence of RPM that could enable a dominant dealer to maintain or enhance its market power or a dominant manufacturer to foreclose rivals from available mareting outlets.").

prerequisites of specific models in past RPM cases. They cannot confirm whether the models are theoretically valid/ consistent. The empirical evidence in the Ippolito study suggests that RPM in the case sample is frequently used for complex products, which makes the free rider theories a plausible explanation in these cases. What the empirical evidence cannot confirm is whether the welfare-enhancing effects, predicted under the free rider theories, occurred; for example, it cannot rule out / overcome the doubts that have been raised with regard to the Telser model's prediction of positive welfare effects based on the argument that a definite increase in consumer welfare can only be predicted, if all consumers value the RPM-induced services equally, and that, if consumers value the services to different extents, whether welfare increases depends on the consumer evaluations in the specific case.[214] This is something the legal decision-maker/policy-maker needs to keep firmly in mind; if it is told by the scientific discourse that the "overwhelming evidence" shows that that RPM is most often benign, it does not mean that the theoretical validity of the economic models have been confirmed by evidence.

(b) Validity of the studies for the use of RPM today (too old data)

The 'incidence studies', which the prevailing view relies on, come not only with several methodological shortcomings, which limit their validity/strength to a great extent. In addition one must be aware of how little and how old the data is which these methodologically weak studies rely on. *Ippolito* and *Overstreet* both analyze RPM cases from the 1960s and 1970s so that it must be considered whether this data can still provide valid information on how RPM is used today.

The data used, i.e. the RPM cases examined, is from the decades before 1982 and is, thus, rather "antiquated"[215], though this does not prevent the majority opinion in *Leegin* to consider them to be "recent studies"[216]. The economic context, in which RPM is used today, may be very different from that of the 1960s and 1970s, within which the analyzed cases occurred. In particular the emergence of the internet, which as we will see below has drastically changed the information environment and with it the decision-making process of consumers and thus also

[214] Comanor and Scherer (2007: 4-5), who point to Scherer and Ross (1990: 541-548) for the most transparent synthesis of the two earlier proofs of Scherer (1983) and Comanor (1985).
See also for example OECD (2008: 181).
[215] Brunell (2007: 511).
[216] *Leegin Creative Leather Products v. PSKS*, 551 U.S. 877, 890 (2007)

the consumer demand factors, may have led to changes, which render the analyzed data irrelevant for the use of RPM today.

For example, it may have been reasonable at the time of the Ippolito study to use product groups that point to the value of pre-sale information to consumers, in particular the 'complex good' category, as an indicator for the applicability of the free rider theories. It may be doubted though that this today would be the case and it is questionable what relevance the finding that in the 1960s and 1970s RPM was used very often for complex products has for today.

The potential applicability of the Telser model has shifted with the emergence of the internet so that *Ippolito's* chosen indicator 'complex goods' is not plausible for a test of the use of RPM in the internet era.[217]

Pre-internet the Telser model concerned the free riding of the new retail format of discounters on the services provided by the traditional full-service dealer; discounters were assumed to be able to undercut the traditional full-service dealer due to not providing the same level of services. In this context the services, which were not provided by the dealer, but only by the traditional retailer, concerned consumer education. They enabled the consumer to understand the product, its features, use and capabilities and thus to assess directly and pre-sale the quality of the (physical) product. Put into the terms of information economics, the product uncertainty that was mitigated through the RPM-induced services stemmed from the complexity of the product and the consumer's lack of expertise, it could not be cleared with mere physical inspection, which also the discounter, which was assumed to be free riding on the services provided by the more traditional 'full-service' retailer, could offer.[218] *Ippolito's* indicator (the complexity of the product) was at this time, i.e. pre-Internet, plausible.

With the emergence of the internet though the potential applicability of the Telser model has shifted; the internet dealer is assumed to be free riding on the services provided by the physical store. The one thing the consumer cannot be provided with virtually through the web is the possibility to interact with and inspect the product in person. The Telser model is thus potentially applicable not to services that are needed to mitigate a product uncertainty stemming

[217] On the shift in view of the radically changing information environment to which consumer appear to be adapting see below chapter 3 II.B.
[218] On this below chapter 3 II.C.

from the complexity of the product, but rather (if at all) to mitigate the product uncertainties stemming from the omission of physical interaction with/ inspection of the good.[219]

(c) Conclusion

All of the above points lead to the conclusion that the 'incidence studies', which the prevailing view cites in support of its position that RPM is most often benign, do not provide very strong evidence for the claim made.

The points made are.

> It is not clear how representative prosecuted RPM cases are for the general use of RPM.
>
> In addition, and again particular relevant for the validity of the data with regard to the claim that the positive models frequently apply, not all models are tested, in particular the Klein model, on which the prevailing view puts its emphasis and which it claims is the most broadly applicable model among the positive models, is not tested.
>
> Furthermore, and this is the same as for the 'apparent likelihood' discussion above, the 'incidence studies' cannot confirm the theoretical validity of the models, in particular not whether or not the effects on welfare are correctly predicted.
>
> And last, a big question is whether data from the 1960s and 1970s can tell us anything about the use of RPM today, in particular as the positive models depend on the presence of demand-increasing pre-sale services and thus on consumer behavior, which, as discussed below,[220] has been drastically changed through the emergence of the internet.

[219] Compare the information systems literature which conceptualizes different dimensions of product uncertainty in the online environment (thus extending the in the offline-context developed categories introduced by Nelson (1970) using for example the concept of the 'intangibility level' to "calibrate the level of information loss aroused from the omission of physical investigation (i.e., high intangible products mean products with a high degree of product uncertainty)" (Kim and Krishnan (2015: 2452) or "the concept of digital and nondigital attributes of a product in the online environment[, where a] digital attribute refers to product information that could be communicated at low cost to the consumer over the Web" (Kim and Krishnan (2015: 2452 describing the concept, which has been introduced by Lal and Sarvary (1999)).

[220] See below chapter 3 II.B.

D. Empirical evidence on the *effects* of RPM ('effects studies")

The 'economic consensus' uses a third method to examine the consistency of the available models with real world data and cites also 'effects studies' in support of its claim that RPM is most often benign.

While the first two types of arguments, i.e. the 'apparent likelihood'/'reasonableness' test and the 'incidence studies', have focused on estimating how often the factual conditions of the alternative models can be expected to occur in real world markets, the third type of argument attempts to estimate the plausibility of the models from a different angle: it looks at evidence of the actual *effects* of RPM on real world markets. What may be called 'effects studies' (in contrast to the above examined 'incidence studies') estimates the *effects* or *consequences* of RPM on a measurable market variable (e.g. price, output, stock market returns), which may be used as a proxy for consumer welfare or firm value; from the estimated effects conclusions are drawn for the relative significance of the available theoretical RPM models.[221]

To support the claim that RPM most often is benign, economists refer to three different effects studies, namely Cooper *et al.* (2005a; 2005), Lafontaine and Slade (2008) and Overstreet (1983).[222] All three of them are 'survey studies', i.e. are reviews of a set of available 'effects studies', which means the prevailing view cites not directly the studies on the effects of RPM, but merely a study of the studies, so to say.

1. The 'survey studies' Cooper et al. (2005a) and Lafontaine and Slade (2008)

This section looks at the survey studies of Cooper et al. (2005a) and Lafontaine and Slade (2008), which can be examined together, as both review an overlapping set of empirical studies, both look (in contrast to Overstreet (1983)) at the effects of vertical restraints in general (not RPM directly) and both arrive at similar conclusions.[223]

The key conclusions of Cooper et al. (2005a) and Lafontaine and Slade (2008), which are repeated again and again by the prevailing view in support of the position that RPM is in most

[221] On the distinction between *incidence* and *effects* studies see Lafontaine and Slade (2000: 400).
[222] See for example Lambert and Wright (2008: 227); Wright (2009: 22); Wright (2014: 18); Wright and Ginsburg (2013: 2422); O'Brien (2008: 73). Those studies are not cited in *Leegin*.
[223] Cooper et al. (2005b: 58) note themselves that "[o]verall, our review leads us to characterize the empirical literature on vertical restraints and vertical integration in much the same manner as Lafontaine and Slade".

instances pro-competitive, are the following. From Cooper et al. the key finding cited is that "[e]mpirical analyses of vertical integration and control have failed to find compelling evidence that these practices have harmed competition, and numerous studies find otherwise"; and while "[s]ome studies find evidence consistent with both pro- and anticompetitive effects", *"virtually no studies can claim to have identified instances where vertical practices were likely to have harmed competition"*[224]. Similarly, from a different version of the Cooper et al. survey the key conclusion cited is that "vertical restraints are likely to be benign or welfare-enhancing"[225]. From Lafontaine and Slade the finding is cited that "the empirical evidence concerning the effects of vertical restraints on consumer wellbeing is surprisingly consistent[;] [s]pecifically, it appears that when manufacturers choose to impose restraints, not only do they make themselves better off, but they also typically allow consumers to benefit from higher quality products and better service provision … the evidence thus supports the conclusion that in these markets, manufacturer and consumer interest are apt to be aligned"[226]. These key sentences, cited again and again by the prevailing view, create the impression that the frequent benign use of RPM is clearly supported by empirical evidence, but a closer look at how the evidence has led to these key findings shows that it can be doubted that the studies strongly support the claims made.

The following sections will dissect how the so often cited key findings are reached. This is an important step, if one wants to be able to gauge the strength of the evidence. When reading the cited key sentences from these studies, two points need to be kept in mind: first, that they come from survey studies (i.e. studies surveying other studies) and not directly from the studies on the effects of RPM that are included in the survey study sample; and second, that the examined sample in the survey studies are studies on vertical restraints in general, not on RPM specifically. With regard to the first point this means that that the consistency of the findings of the 'survey studies' also depends on the survey method; for example could the selected sample of the surveyed study be biased, which is an argument that has been made by several economists against the survey method of Cooper et al. (2005a).[227] Also important is the second point, namely that the conclusions made in the surveys refer to vertical restraints in general, as they

[224] Cooper et al (2005a: 658) as cited by Wright (2009: 22) and Wright (2014: 18), the emphasis has been added by Wright. These key sentences are (in part) also repeated by Wright and Ginsburg (2013: 2422).
[225] Cooper et al (2005b: 63) as cited by Lambert and Wright (2008: 227).
[226] Lafontaine and Slade (2008: 409). Part or all of this key sentence(s) is cited by Wright (2014: 19), Wright (2009: 22), Lambert and Wright (2008: 227-228), O'Brien (2008: 73).
[227] Comanor et al. (2005) reject Cooper et al.'s (2005a) survey method as severely one-sided arguing that the survey "ignores published studies of important cases that point in a different direction" (Comanor et al. (2005: 5). A similar argument is made by Scherer (2005).

include in the surveyed sample studies of the effects of all kinds of vertical restraints, not just of RPM. Only a small fraction of the surveyed effects studies look at RPM specifically. As the prevailing view claims that the available evidence shows that RPM is almost always benign and that the positive models on RPM frequently occur, it appears to be important to look at what evidence on RPM directly is actually included in the 'survey studies'[228], which is done in the following sections.

Of the 22 and 23 empirical studies, respectively, which are surveyed, only three look at evidence on the effects of RPM. Lafontaine and Slade (2008) survey Gilligan (1986) and Ippolito and Overstreet (1996) in their review; Cooper *et al.* (2005a) include the same two 'effects studies' and in addition Hersch (2004). This section looks directly at these surveyed 'effects studies' on RPM and shows that the main view's claim cannot be supported by the evidence on RPM specifically.

(a) Gilligan and Hersch

Both, the 'effect studies' of Gilligan (1986) and Hersch (1994), offer merely ambiguous conclusions, finding the evidence consistent with both pro- and anticompetitive effects.

Gilligan examines the effects of RPM challenges on (inter alia) share prices of the RPM-using supplier using a broad set of samples, namely 43 RPM challenges covering a wide range of markets[229]. His conclusion is that effects on the observed variable, and thus on consumer welfare, were mixed pointing to both pro- and anti-competitive uses of RPM.[230]

Hersch examines the effects of the Supreme Court's *Schwegmann* decision[231], which weakened the enforceability of RPM contracts, determining the effects of this decision on the share prices of 53 manufacturers and 23 dealers.[232] Like Gilligan (1986) he looks at a broad set of samples

[228] Also the US contribution to OECD (2008: 220) examines an 'effects study' directly, instead of relying on the survey studies that do not focus on RPM specifically.
[229] See for the list of examined RPM challenges including markets concerned Gilligan (1986: 555, Table A1).
[230] See the summary of finding in the tables of Cooper *et al.* (2005a: 650, Table 1) and Lafontaine and Slade (2008: 406, Table 10.2).
Gilligan (1986: 554-555) in his conclusion speaks of "a wide range of allocative and productive effects [of RPM]" noting that "RPM may have differing welfare consequences across industries and, possibly, firms within a given industry" emphasizing that the evidence "clearly suggest[s] that RPM sometime causes allocative distortions in manufacturing and distribution" explicitly rejecting the per se legality of RPM.
[231] *Schwegmann Brothers v. Calvert Distillers,* 341 US 384 (1951).
[232] See the list in Hersch (1994: 215, Appendix). On selecting the sample Hersch (1994: 208-209).

and arrives at the same mixed conclusions, finding evidence that is consistent with both pro- and anti-competitive uses of RPM, namely the dealer collusion model and free rider models.[233]

(b) Ippolito and Overstreet

In contrast to the studies above, Ippolito and Overstreet (1996) offers an unambiguous result, estimating, based on the observed effects, an increase in consumer welfare which points to pro-competitive uses of RPM[234]. Like Gilligan (1986), Ippolito and Overstreet (1996) estimate the effects of an RPM challenge on (inter alia) the effects on share prices[235], but in contrast to *Gilligan*, they look at only one case,[236] which is actually one of the 43 cases also included in *Gilligan's* broad sample.

(c) Conclusion on RPM specifically

While the cited survey studies conclude that the evidence shows that vertical restraints in general are likely to be benign,[237] this conclusion cannot be confirmed with regard to RPM specifically, as the surveyed studies on RPM come to a different conclusion.

Of the three empirical studies on the effects of RPM included in the survey studies of Cooper et al. (2005a) and Lafontaine and Slade (2008) only the narrow one-case study of Ippolito and Overstreet (1996) offers an unambiguous result. *Ippolito* and *Overstreet's* study only confirms that in this one individual case RPM was likely benign; the two broader studies can only confirm that RPM may be used either with positive or negative welfare effects.

2. Overstreet 1983 – The effects part of the study

The FTC staff report by Overstreet (1983), whose 'incidence study' is examined above,[238] also includes a 'survey study' of the available evidence on the effects of RPM.[239]

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[233] Compare the summary in Cooper *et al.* (2005a: 651, Table 1).
See also Hersch (1994: 214) ("With respect to why manufacturers adopt RPM, support was found for the dealer cartel, free-rider, and product reputation hypotheses, with the latter being somewhat tenuous. Support was not found for the manufacturer cartel or price discrimination hypotheses.").
[234] Ippolito and Overstreet (1996: 325-326) conclude that "the available ex post market evidence points toward a principal-agent explanation for Corning's use of RPM as a means to achieve greater distribution of its products". For details of the findings see the summary in the tables of Cooper *et al.* (2005a: 650, Table 1) and Lafontaine and Slade (2008: 406, Table 10.2).
[235] Both look at share price responses (as proxy for firm's future profits), Ippolito and Overstreet (1996) look in addition to the effects on Sales and Annual Advertising expenditures.
[236] *In the Matter of Corning Glass Works,* 85 FTC 1061 (1975), modifying 82 FTC 1675 (1973), affirmed *Federal Trade Commission v. Corning Glass Works*, 509 F.2d 293 (7th Cir. 1975).
[237] Compare the key sentences from the 'survey studies' cited above.
[238] See above II.C.1.
[239] The sample of studies surveyed also includes a few 'incidence studies'.

Overstreet reviews the many studies that were conducted surrounding the changes in the US fair-trade legislation in the 1930s.[240] In the survey studies prices (and to a lesser extent other factors[241]) before and after the passage of fair-trade legislation, prices of fair-traded and nonfair-traded items, prices in fair-trade areas with those in nonfair-trade areas were compared.[242]

Overstreet in this part of the staff report comes to the same ambiguous conclusion as the more recent surveys of Cooper et al. (2005a) and Lafontaine and Slade (2008): "evidence suggests that, in fact, RPM has been used in the U.S. and elsewhere in both socially desirable and undesirable ways"[243].

3. Analysis

There are two points that can be made with regard to the prevailing view's reliance on the examined survey studies on the effects of RPM. The first regards the use of effects studies more generally and their very limited rigor in view of methodological problems (section (a)). The second regards the technique of the prevailing view in the RPM context to merely cite the key sentences of the survey studies without taking a look at the actual evidence behind it, i.e. at the surveyed effects studies (section (b)).

(a) Methodological limits of effects studies

In general effects studies, such as those cited by the economic consensus indirectly through the survey studies, have the following limitations, which have to be kept in mind when evaluating the strength of the empirical evidence behind an economic position.

(i) Uncertainty of 'natural experiments' and 'event studies'

The problem of any effects study in economics is that there are no controlled/designed experiments to test the examined variable, in our case the effects of RPM; this makes it difficult to quantify the effects of RPM on any market variable.

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[240] See Overstreet (1983: 5-7) for a short overview over the "era of fair-trade legislation".
[241] Surveys included in Overstreet's sample looked for example at small business failure rates, sales per drug store, see Overstreet (1983: 17-18).
[242] See Overstreet (1983: 106-119) examining first empirical studies of the effects on price than on other factors.
[243] Overstreet (1983: 163).

In order to estimate the effects of RPM on an observed market variable, one must compare the market variable in the world with RPM to the market variable in the world without RPM, but only one of those two can be observed.[244] The 'effects studies' make use of 'natural experiments' (often in form of an 'event study'), which are subject to a great deal of uncertainty, much more than controlled experiments; this is so, because the observed change of the market variable cannot definitely be causally linked to the event, because in a natural environment, here the economy or the market, there are many uncontrolled (unmeasured, possibly unknown) factors, which could affect the dependent variable and account for a difference between treatment and control group.

For example in *Gilligan's* event study on the effects of RPM decisions on share prices it cannot be said with certainty whether the stock market responded to the discontinuance of RPM or rather to the prospect of fines or treble damages.[245] Though statistical techniques (e.g. difference-in-differences, time-series estimates) that mitigate the effects of other (i.e. extraneous) factors[246] are used in the more recent studies, the reliability of natural experiments remains limited.

(ii) The often weak link between observed effect on market variable and model and measurement problems

It is also difficult to draw definite conclusions about the RPM models from the observed effects. Effects on consumer welfare, based on which pro- and anticompetitive models are differentiated, cannot be measured directly.

This is in particular a problem in the effects studies surveyed by *Overstreet*. The measured variable in most of these effects studies is price,[247] which is not only not directly indicative for

[244] Compare Klick and Wright (2008: 4) („Econometrically identifying the competitive effects of vertical restraints is notoriously difficult because one must compare the world with the restraint to the world without the restraint without observing the latter.").
[245] Hersch (1994: 207).
[246] Harris (2013) is for example using different statistical techniques, in particular time-series estimates, difference-in-differences models.
[247] Of the surveyed studies the following studies looked at retail price (some proxy for retail price), in particular comparison of price before and after passage of fair trade legislation (difference in time): Grether (1936); Wolff and Holthausen (1938); Gault (1939); Lewis (1939); Ostlund and Vickland (1940);
comparison of changes in prices of fair-traded and nonfair-traded items (difference in products): Grether (1939); Bowman (1955); Sandridge (1952); Department of Justice (1956; 1970).
Other variables used include the operating costs of drugstores / operating revenue as a percent of sales (Eli Lilly Overstreet 117-118), sales per drug store (as proxy for size of drug stores) (Leonard Weiss Overstreet 117); small business failure rates S.M. Lee, Department of Justice 1962; Library of Congress).

consumer welfare,[248] but in these antiquated studies also not even measured reliably as often proxies for actual retail prices were used such as advertised prices[249] or wholesale prices[250] and it was relied for price information on memories of retailers,[251] which led to the use of incredibly small samples to derive average prices.[252]

(iii) Sample selection bias

The 'effects studies' of *Gilligan* and of *Ippolito* and *Overstreet* examine the effects on share prices of individual events, namely RPM enforcement decisions. They have thus the same sample selection bias problem as the 'incidence studies' examined above, as pointed out by *Hersch* who argued that "[f]irms that were caught may not be representative of all firms that used RPM, and illegal usage could differ from legal usage"[253].

(b) Link between evidence and the claims by the prevailing view

The evidentiary strength or power of the effects studies used to support the claim that RPM is most often benign is limited not only by the general limitations of effects studies, but also by how these studies are used specifically in the context of RPM.

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[248] This is also recognized by Overstreet (1986).
See on this e.g. (Harris 2013: 252) ("increased prices do not necessarily harm consumers"); id., 253 with further references ("Increased prices are harmful if they are the result of decreased quantity and the higher prices are not offset by procompetitive benefits.".
See also Slade (2008: 22) (higher prices can be good, if they result from higher quality services; the combination of higher prices and increased consumption is usually interpreted as being due to increased provision of services, which are costly to provide but are valued by consumers.).
Ratay (1993: 244).

[249] Overstreet (1983: 108) critiqued that Grether (1936) used advertised prices as these do not necessarily say something about average prices.

[250] Overstreet (1983: 109) critiqued a study by McKesson (McKesson 1952) that focused on whole prices as this does not provide information on retail prices.

[251] See Overstreet (1983: 108-9) pointing out several studies (Lewis 1939, Ostlund and Vickland 1940) that relied for retail prices on druggists' memories criticizing that the data may be subject to error or unreliable due to biased reporting (see Overstreet (1983: 109)).

[252] Overstreet (1983: 110-1) pointing out the small sample of Grether (1939) (prices in two stores) and Bowman.
Even very recent studies still note that price data is not readily available and use proxies for retail prices (Harris 2013: 263), though these proxies are more reliable, in particular because much broader data sets are available; Harris (2013) for examples uses the Consumer Price Index ("("CPI is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Given the close similarities between price and CPI, CPI will be used … .").

[253] Hersch (1994: 207).

(i) Reliance on outdated data

Again like the data used in the cited incidence studies the cited effects studies are based on data, whose relevance for today may be questioned, as the economic context, in which RPM is used has changed significantly, in particular in view of the emergence of the internet.

The fact that the two survey studies most often cited in support of the economic consensus view, namely Cooper et al. and Lafontaine and Slade, were published in 2005 and 2008 does not automatically make them "recent", as *Wright* calls them,[254] when using them to derive policy implications for RPM in 2009. If we look at the dates of the data examined in the effects studies, which are surveyed in the cited studies, the data is not exactly recent. *Gilligan* for examples looks at RPM decision before 1982, i.e. mainly from the 1960s and 1970s; this is hardly recent data. *Hersch* looks at the effects of the policy change that was connected with the Supreme Court's *Schwegmann* decision of 1951, again not exactly recent. The 'effects studies' surveyed by *Overstreet* are mostly from the 1930s, which may explain why the survey part of Overstreet is rarely cited, namely only by *Lambert*.

This does not mean that there are no truly recent studies, just that they are not cited by the prevailing view. In particular the recent evidence from the natural experiments in the wake of the Supreme Court's *Leegin* decision[255] are rejected by the prevailing view.[256] Interestingly, while not looking so closely at the methodology in the studies that support their claim, with regard to the post-*Leegin* studies proponents of the prevailing view meticulously examine the methodology in order to reject the studies, whose result point in the opposite direction than the pre-*Leegin* evidence and could possible weaken the prevailing view, in particular its claim that empirical evidence is so clearly supporting its claim.[257]

More specifically, the studies of Harris (2013) and Bailey and Leonard (2010) are ignored as they merely look on the effects on *Leegin* on price, which, and this is universally agreed, is not

[254] Wright (2009: 21) ("Two recent empirical surveys …").
[255] *Leegin Creative Leather Products v. PSKS,* 551 U.S. 877 (2007).
[256] The post-Leegin studies are MacKay and Smith (2014), Harris (2013) and Bailey and Leonard (2010).
[257] Compare the analysis of the MacKay and Smith study by Lambert and Sykuta (2013: 7-10); Wright 2014 (2014: 21)) with the blind citing of key sentences from 'survey studies' without even determining whether the surveyed studies look at RPM specifically (see e.g. Wright (2009: 2) (" … the reader is referred to these surveys for methodological details concerning individual studies"). The supposedly "careful review of both surveys [that] offers a synthesis of the evidence" (Wright 2009: 22) is nowhere to be found as only key sentences from the surveys without further context are cited (see e.g. Wright (2014: 18-19)).

indicative for consumer welfare and thus cannot say anything about whether the positive or the negative models of RPM are more frequent.[258]

MacKay and Smith (2014) look at both changes in price and output in states retaining a rule of per se illegality even post-*Leegin* with those in states likely to assess RPM under the rule of reason, i.e. following *Leegin*. The study, which concludes "that a legal environment friendly to minimum RPM contracts results in price increases across a broad variety of consumer goods", which "are generally accompanied by decreases in output and net harm to consumers", has the potential to undermine the consensus view and has been closely analyzed and rejected by the prevailing view based on (quite convincing) methodological considerations.[259]

The cited studies are not recent, which is problematic not only in terms of relevance of the data for the use of RPM today, but also in terms of techniques applied. Effects studies provide only very uncertain evidence; the statistical techniques that can mitigate the uncertainty are constantly improving so that older studies generally are less reliable than more recent studies. The more recent studies though are rejected by the prevailing view on methodological grounds, which points us to a more general problem with regard the effects studies: due to their limited accuracy it is highly unlikely that there will ever be an effects study that could be consensually interpreted.[260]

(ii) Scarcity of the data

Not only is the data of the cited effects studies not exactly recent, it is also extremely scarce.

As noted above taken together, Lafontaine and Slade (2008) and Cooper et al. (2005a) survey a total of three studies on the effects of RPM.[261] Of those three only two have a somewhat broad set of samples: Hersch (1994) examines the effects of a policy change[262] on the share prices of

[258] Both, Harris (2013) and Bailey and Leonard (2010) look at effects on prices; *Harris'* finding that the abolition of the per se prohibition in *Leegin* increased prices is inconclusive, as without an accompanying decrease in output no conclusion can be made with regard to consumer welfare; Bailey and Leonard (2010) found that the introduction of a per se prohibition in Maryland did not have an effect on the prices of video games; though the authors claim that this evidence "implies that minimum RPM does not always restrain price competition" (id, at 3) , the study is a very narrow one and methodologically problematic and has not been claimed by the consensus view.
[259] Lambert and Sykuta (2013: 7-10); Wright 2014 (2014: 21).
[260] Similarly skeptic Grippini-Fournier (2010: 548) finding it „unclear how sound an empirical assessment is possible, given limitations on the availability of reliable data and the confluence of RPM with other vertical restraints. Judging from the scarce experience, the interpretation of empirical data is unlikely to be consensual."
[261] Lafontaine and Slade (2008: 406) note themselves how scarce the data surveyed, although they researched broadly so that the data examined "should provide an accurate depiction of the state of empirical research on this topic" concluding that "clearly, much more work is needed in this area."
[262] *Schwegmann Brothers v. Calvert Distillers,* 341 US 384 (1951).

53 manufacturers and 23 dealers;[263] Gilligan (1986) looks at the effects of 43 RPM challenges covering a wide range of markets[264], but Ippolito and Overstreet (1996), using the same technique as Gilligan (1986), look at only one RPM challenge,[265] which is also already included in the Gilligan sample.

This is not much data, in particular when the effects studies surveyed by *Overstreet* are left out here, as the data and methods used are so outdated that they can hardly offer any conclusions for the consistency of the theoretical models with the real world use of RPM today.

(iii) Reliance on survey studies of vertical restraints for claims on RPM specifically

As shown above the prevailing view merely cites the key sentences from two survey studies without examining the individual effects studies that are included in the survey sample. This can easily lead to a misleading impression, in particular as the cited survey studies of Cooper et al. and Lafontaine and Slade derive their conclusions from a broad set of diverse empirical studies on different types of vertical restraints. If their conclusions are used in the RPM debate, although the surveys include empirical evidence on the effects of vertical restraints in general, i.e. on different types of vertical restraints, it should be made sure that the cited conclusion accurately portrays the evidence on RPM included in the sample.

As shown above this is not the case. If we look at the three effects studies that actually examine RPM, as opposed to other vertical restraints, we see that the conclusions drawn are predominantly ambiguous. Only the one case study of *Ippolito* and *Overstreet* offers an unambiguous result estimating, based on the observed effects, an increase in consumer welfare, which points to pro-competitive use of RPM[266]. *Gilligan's* findings on the other hand, based on a broader set of samples that also includes the RPM challenge examined by *Ippolito* and *Overstreet*, are ambiguous; effects on the observed variable, and thus on consumer welfare, were mixed pointing to both pro- and anti-competitive uses of RPM.[267] Also *Hersch* offers only

[263] See the list in Hersch (1994: 215, Appendix). On selecting the sample Hersch (1994: 208-209).
[264] See for the list of examined RPM challenges including markets concerned Gilligan (1986: 555, Table A1).
[265] *In the Matter of Corning Glass Works,* 85 FTC 1061 (1975), modifying 82 FTC 1675 (1973), affirmed *Federal Trade Commission v. Corning Glass Works*, 509 F.2d 293 (7th Cir. 1975).
[266] Ippolito and Overstreet (1996: 325-326) conclude that "the available ex post market evidence points toward a principal-agent explanation for Corning's use of RPM as a means to achieve greater distribution of its products". For details of the findings see the summary in the tables of Cooper *et al.* (2005a: 650, Table 1) and Lafontaine and Slade (2008: 406, Table 10.2).
[267] See the summary of finding in the tables of Cooper *et al.* (2005a: 650, Table 1) and Lafontaine and Slade (2008: 406, Table 10.2).

mixed conclusions as pointed out above. Thus, it is inaccurate to merely cite the conclusions of the survey studies in the RPM debate, as evidence.

So, overall all the survey studies merely support the undisputed claim that RPM may be used either with positive or negative effects on welfare; Overstreet (1983) is explicit in this respect; the other two survey studies themselves make only a claim as to the effects of vertical restraints in general; if one takes a closer look at the evidence on RPM specifically, which is included in the studies, this evidence comes only to ambiguous results.

(c) Conclusion

The effects studies cited by the prevailing view do not support the claim made based on them that RPM is most often benign.

IV. Conclusion: The strength of the evidence of the economic consensus

No "overwhelming" evidence

The prevailing view posits that RPM is most often used in an efficiency-enhancing way. It claims that based on the available models and the available evidence this is the only conclusion that can be reached at this point.[268]

We have looked at the available models, based on which RPM may have either positive or negative effects on welfare and which are the basis for the prevailing view as it is from those models alone that it attempts to pick the most consistent based on the available evidence. What is difficult to see is where the supposedly "overwhelming evidence" that RPM is almost always benign, i.e. that the positive RPM models frequently apply, is.

With regard to the negative models the prevailing view can quite convincingly show that the negative models, at least those, which are actually examined in terms of their consistency with real world data, will rarely apply. In particular the reasonableness standard, which is used as

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Gilligan (1986: 554-555) in his conclusion speaks of "a wide range of allocative and productive effects [of RPM]" noting that "RPM may have differing welfare consequences across industries and, possibly, firms within a given industry" emphasizing that the evidence "clearly suggest[s] that RPM sometime causes allocative distortions in manufacturing and distribution" explicitly rejecting the per se legality of RPM.

[268] See e.g. Wright (2009: 23) ("it is impossible to evaluate the existing empirical literature without reaching the conclusion that these practices are nearly always efficient").

evidence due to the limits of empirical evidence in economics, provides support for the conclusion that the negative models rarely apply.

With regard to the positive models though, the prevailing view is not able to rely on strong evidence that the available positive models actually frequently apply.

The examination of the reasonableness or apparent likelihood of the conditions of the models has not been rigorously examined, in particular as not all conditions that must be satisfied for a model to apply are considered, but only isolated one or two conditions. We have seen the example of the examination of the Klein model, where only the condition that there is an incentive incompatibility is in depth shown to be regularly satisfied on real world markets, in particular in case of branded goods.

The incidence studies do not provide any evidence on the positive models. The only evidence produced on the positive models is that by *Ippolito* on the occurrence of the free riding models, but here, as *Ippolito* herself concedes, a very weak test is used. More importantly, and in addition to the methodological limitations of the incidence studies and the outdatedness of the data, there is no evidence on the Klein model, which according to the prevailing view is the main explanation of RPM.

The effects studies cannot show that the use of RPM is most often pro-competitive, because as shown above, the cited studies, contrary to what the prevailing view wants us to believe when it cites only the conclusion from the survey studies and not directly the studies on the effects of RPM[269], the effects studies come only to an ambiguous conclusions, i.e. that RPM may be used either pro- or anti-competitively.

The more general claim of the economic consensus still stands

Based on the analysis of the empirical evidence it can be better understood now which parts of the economic consensus' claims are based on evidence and which are based on logical assumptions. What can be shown is that the available negative models of RPM are likely to be inconsistent with the real world use of RPM in most cases. What cannot be shown though is

[269] Interestingly from the three RPM studies included in the survey studies, only the one study that finds that RPM is unambiguously benign is cited by the prevailing view (US contribution to OECD 2008, 220); this although it is the study of one (!) individual case, which is included in the sample of the broader studies; the two broader studies on RPM, which come to ambiguous results with regard to the effects of RPM are not cited individually, only as part of the surveys.

that the available positive models, which concretize *Bork's* more general claim that RPM in most cases will be used to increase efficiency, frequently apply; it can only be logically concluded from the fact that the available negative models rarely apply combined with the fact that there is no evidence that the available positive models do not frequently apply. This position is only valid insofar as there are no other explanations available to explain the use of RPM except those tested by the prevailing view.

Moving on

There are several ways to argue against this position. Some have attempted to show that it is not true that the available negative models only rarely apply;[270] but this exercise seems to be moot, as the examination of the apparent likelihood of the conditions can solidly show that the conditions, under which the available negative models apply, are very narrow. Others have focused on the theoretical validity of the models, which in the empirical tests of the models is assumed but not confirmed.[271]

This dissertation follows a different direction.

It follows up on the finding of this chapter that there is no convincing evidence that the positive service-based models frequently apply by bringing some new evidence into the debate. This evidence shows that, contrary to what the economic consensus suggests, the service-based positive models of RPM are unlikely to be consistent with the real world use of RPM. In order to do so chapter 3 uses the apparent likelihood/reasonableness standard, which also the prevailing view has used as evidence. Importantly though, the reliance on this type of analysis as evidence or more generally as a method to test how consistent the abstract models are with real world data is seen not as a second best solution. In view of the limits of the empirical studies in form of incidence or effects studies, which have become apparent in the above analysis and which confirm the often-heard general claim that the accuracy and rigor of empirics in

[270] For a recent example see Paldor (2007: 296) (collusion-based models and exclusion can frequently explain RPM).
The argument that the dealer-collusion model applies more often than recognized by the prevailing view can often be found. See for example Brunell (2007: 511) with reference to Overstreet and Fischer (1985: 45, 49-50); Overstreet (1983: 15) with further references; Areeda and Hovenkamp (1620c4, 217).
[271] For example Grimes agrees with the prevailing view that the Klein model is frequently applicable (Grimes 2010: 104; 107), but argues that the increase in sales in the model cannot be equated with an increase in consumer welfare, see for example Grimes (2010: 106-107; 110; 119) criticizing Klein and Bork's "if-it-makes-money-for-the-producer, it must-be-good" test" (Grimes 2010: 110).

economics does not come close to that of the natural sciences,[272] the apparent likelihood/reasonableness examination of the economic models' conditions is the most promising way to be able to test the positive models, on which the prevailing view relies but for whose consistency the prevailing view does not provide any evidence.

At the end of chapter 3 implications for the legal debate on RPM are drawn from the findings of chapter 2 and 3. What does it mean for the legal debate on the EU's strict stance towards RPM that there is not only no convincing evidence that the positive service-based models are consistent with real world data (chapter 2), but that there is also indeed evidence that points to quite the contrary, namely that the service-based positive models, on which the focus on the EU is so often put, cannot explain the real world use of RPM (chapter 3)?

In chapter 4 and chapter 5 we look at an alternative explanation for the use of RPM that is more likely to explain the use of RPM and that has not been the focus of the RPM debate so far, thereby moving the focus of debate into a new direction, namely from the service-based to price-based explanations of RPM.

[272] See e.g. Bishop (2013: 72). Similar also O'Brien (2008: 43) ("While consistency of theory is paramount, it must be admitted that this principal is harder to apply in economics than in some of the better-developed physical sciences.").

Chapter 3: The apparent likelihood of the service-based models

I. Introduction

A. Structure and purpose of the chapter

This chapter goes into the same direction as the previous chapter strengthening the argument made in the previous chapter. It attempts to show that not only is the evidence cited by the economic consensus not very strong, but that there is even evidence that the positive models, to which the economic consensus refers, are unlikely to apply. It looks at the conditions of the positive service-based models and asks how likely it is that all the conditions of a particular model will be satisfied on real world markets thereby adding to the economic consensus' incomplete analysis in this regard. The focus remains in the area, in which the EU approach diverges from the economic consensus, namely the question whether the elimination of intrabrand competition through RPM is typically outweighed by interbrand.[273]

The analysis is done in two steps. **Section II** looks at the positive models' conditions that relate to the services the supplier presumably seeks when using RPM. **Section III** then looks at the positive models' condition that RPM must be the most efficient mechanism to get the dealer to provide the services. It asks how likely it is that RPM is the most efficient mechanism to induce the sought-for pre-sale dealer services. By doing so this section revisits and expands on the argument that also the Commission uses.

Sections IV and V conclude. **Section IV** concludes by combining the findings from section II and III that both point into the same direction finding that it is highly unlikely that RPM can be explained by the service-based positive models, which currently are the focus of the European debate. **Section V** draws conclusions from the findings of chapter 2 and chapter 3 for the debate on the EU's strict stance on RPM.

[273] For the analysis of the 'apparent likelihood' arguments made by the 'economic consensus' see above chapter 2 III.B.

B. Methodology: The use of the 'apparent likelihood' standard

The chapter chooses to use the apparent likelihood / reasonableness standard as a method to produce evidence,[274] which looks at the conditions of the models and determines whether they are likely to be satisfied on real world markets, and it chooses to focus on the positive models in an attempt to strengthen the argument made in the previous chapter that there is no evidence that could convincingly show that these models frequently explain the use of RPM and that thus there is no evidence that RPM will regularly enhance interbrand competition.

The apparent likelihood / reasonableness standard as a method is chosen for several reasons.

First. We have seen the limitations of incidence and effects studies on RPM in chapter 2. In particular in the view of the scarce data on the effects and incidence of RPM, which is regularly lamented by economists,[275] it makes sense to use the apparent likelihood standard. Also the methodological ambiguities of incidence and effects studies make it unlikely that they could provide evidence in a form that could be consensually interpreted and not be rejected based on methodological reasons;[276] we have seen the example of the newer quantitative research post-*Leegin* that the prevailing view can easily reject based on methodological reasons.[277] It thus seems important to use other evidence, here in form of the reasonableness/apparent likelihood standard combined with the use of anecdotal evidence from marketing/management literature, in order to make sure the "best available" (quantitative) evidence does not point the policymaker to models that are too far from reality.[278]

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[274] On the reasonableness standard as evidence see O'Brien (2008: 44) ("A second type of evidence relates to the reasonableness of the assumption that for the basis for the theory."). See also Lambert (2010: 185) who uses the term 'apparent likelihood' for this type of analysis.

[275] Noting how scarce the evidence is, is in the economic literature followed by the call for more empirical research (see e.g. Cooper et al. (2005a: 63), Lafontaine and Slade (2008: 399, 406); Schwalbe (2011: 1210, 1213). This an elemental part of the economic discourse, which has the purpose of producing ever more accurate knowledge, which is an important difference to the law that needs to provide an answer to the legal issues at a specific time and cannot wait for more accurate answers (on the differences between law and economics see below chapter 5 II.

[276] Similar Grippini-Fournier (2010, 548) („unclear how sound an empirical assessment is possible, given limitations on the availability of reliable data and the confluence of RPM with other vertical restraints. Judging from the scarce experience, the interpretation of empirical data is unlikely to be consensual.").

[277] See above chapter 2 III.D.3 (b)(i).

[278] For a similar, but more far-reaching claim see Sheff (2013). Sheff equates the reliance on quantitative empirical studies due the inescapable/inevitable empirical uncertainty with reliance on "plausible but unprovable parables" and rejects claims for more data (in form of quantitative analysis) as an answer to the empirical uncertainty; Sheff proposes to "free[] us from the fool's game of arguing these empirical questions in the absence of relevant data" by moving away from a consequentialist to a deontological justification/explanation of trademark law.

Second. We have seen in chapter 2 that also the 'economic consensus' accepts this method as a valid type of evidence.[279] This type of evidence is also particularly useful if used to show that a model *does not* frequently apply, i.e. that it is likely to be *inconsistent* with reality, while it would be more difficult to use this type of evidence to show that a model *does* frequently apply and is likely to be *consistent* with reality. While the 'economic consensus' convincingly uses this type of evidence to show the unlikelihood of the negative models, when it uses it to support the claim that the positive models regularly apply, the argument is weak. This is so because in order to show that a model frequently applies strong evidence would require a systematic examination of all the conditions of the models. To reject a model as unlikely, on the other hand, it can be sufficient to look and reject as unlikely just one condition of the model or to point out that the different conditions are unlikely to be fulfilled at the same time. Thus this type of evidence is particularly useful, if an argument is build that rejects the positive service-based models, as it is done here.

Third. While there are some isolated arguments in the older economic literature and also some in the recent EU debate on RPM that are implicitly based on the 'apparent likelihood' standard and that point to the unlikelihood of the free riding model,[280] there is no systematic examination of all conditions of the models put together that could provide a convincing refusal of the positive service-based models. This chapter attempts to provide such a systematic examination. Furthermore, we have seen in chapter 2 that, even though defenders of the EU's strict approach often focus on refusing the free rider models, the 'economic consensus' considers the Klein/contract enforcement model as the most likely explanation for the pro-competitive use of RPM building this argument primarily on an (as we have seen incomplete) apparent likelihood examination. In the recent debate the Klein model has been rather neglected, in particular there are no apparent likelihood based arguments brought forward to refuse the model as uncommon as mainly the free rider models are discussed. This chapter, by closely examining the likelihood of the Klein model, closes this gap.

Fourth. There are first attempts in antitrust research to make use of the marketing literature,[281] which is particularly well adapted to provide insights on the very fast developing new market

[279] On the reasonableness standard as evidence see O'Brien (2008: 44) ("A second type of evidence relates to the reasonableness of the assumption that for the basis for the theory."). See also Lambert (2010: 185) who uses the term 'apparent likelihood' for this type of analysis.
[280] See for example Lao (2010). On the difference to the argument made here see below II.C.4.
[281] The American Antitrust Institute has sponsored research to use the marketing literature to doubt the free riding models, cf. American Antitrust Institute (2009): 15, Fn. 45). This research includes for example Gundlach et al. (2010).

realities with regard to the marketing and promoting of products, which are at issue in the dealer service theories. These new market realities find their way into the more slowly moving economic disciplines with their abstract models and quantitative techniques only very slowly. The apparent likelihood standard offers a good and methodologically clear way to connect these very recent findings from a business discipline to the economics of RPM.

II. Apparent likelihood of the service-related conditions

This section looks at the apparent likelihood of the service-related conditions of the positive models, in particular of the free rider models (**section C**) and of the Klein model (**section D**). It does so with the help of findings from the marketing literature.

A. Methodology

This section justifies the use of the marketing literature in antitrust research and explains the structure of the argument.

1. The use of marketing literature in antitrust

The positive models that have been discussed so far and that are the focus of the 'economic consensus' (i.e. the free riding models and the Klein model) share the assumption that retailers' point-of-sale services matter, i.e. are crucial for sales as consumers in their purchase decision rely on them.[282] These models depend on demand factors, as RPM is justified as being necessary to induce demand-enhancing services/quality signals; whether these factors, such as the provision of pre-sale services, in fact enhance demand depends on consumer behavior, on how consumers make the decision to purchase a product. This is exactly what the marketing

[282] Compare Klein (2009: 15): "The theory of [RPM] in the absence of retailer free-riding [i.e. the Klein model] begins with the same assumption that consumer demand for some products is related to the services supplied by retailers at the point-of-sale."

literature focuses on,[283] which makes it useful for the estimation of how likely the conditions of the positive models are fulfilled.

Marketing research, as an applied, practical discipline, aims to derive practical implications for individual firms; it converts theories and empirical findings on buyer behavior into "marketing knowledge", which, generally, is "what marketing academics and consultants teach and marketing managers draw upon in formulating marketing plans"[284]. As it analyses consumer behavior it is useful for estimating the apparent likelihood of the condition of the positive models that consumer demand crucially depends on dealer service provision.

It is true that the findings from marketing research discussed below are not based on systematic, robust empirical research, which (most) economists would argue to be necessary, if policymakers were to rely on it.[285] It could be argued that the data relied on in the qualitative research methods used by marketing is often no more than anecdotal evidence, and it could be criticized that the findings from marketing research "may be influenced by the researchers' biases or preconceptions, their analysis may rely on cherry-picked examples, and their conclusions may be difficult to generalize"[286].

Despite these doubts the use of marketing research can be useful and justified in the context of the debate on the effects of RPM, in particular if its limitations are kept in mind. The findings of marketing research discussed below are used here only in order to make the argument that based on what above has been termed a 'reasonableness' or 'apparent likelihood' standard it is unlikely that there are frequently demand-enhancing dealer services that must be induced through RPM; they are used to support and strengthen arguments based on the reasonableness of the models' conditions, where the conditions relate to consumer behavior. As seen in chapter 2 also the prevailing view cannot rely on robust empirical evidence to show that the positive models are consistent with the real world use of RPM, there is simply not enough data that

[283] Compare Sheff (2011: 1252) noting that "there is an entire field of academic and professional study devoted to analyzing, predicting, and influencing the consumer decision-making process: marketing".
[284] Rossiter (2001: 9).
Marketing knowledge comes in different forms, according to Rossiter (2001:20) it has four forms, namely "(1) marketing concepts, which are definitional building blocks of knowledge in our discipline; (2) structural frameworks, which are lists of concepts selected and organized to frame marketing problems so that they might better be solved; (3) strategic principles, which are conditional 'if, do' recommendations for managerial actions; and (4) research principles, which are conditional 'if, use' recommendations about the research techniques that are likely to give the best answers based on managers' states of knowledge about the market."
[285] Similar Sheff (2011: 1268).
Ippolito (2010: 156) for example rejects Lao's claim (Lao (2010: 491; 2011: 2)) that based on empirical marketing studies free riding on dealer-provided information is uncommon due to the information available online; she considers it a "myth" that "free riding is an infrequent occurrence in today's markets making it an unimportant explanation for RPM" finding that "[t]his is an empirical assertion that has little evidentiary support."
[286] Sheff (2011: 1268).

would be necessary for effects/incidence studies of RPM, in particular no current data that has been collected since the internet has brought changes to consumer behavior. Only *Ippolito* offers direct evidence on the applicability of the Telser model, but, as shown above, this evidence is very limited, as *Ippolito* only looks at RPM cases from the 1960s and 1970s determining in how many of them complex goods were at issue.[287] Marketing research that looks at consumer behavior of today, in particular after the emergence of the internet, seems to provide the more relevant data here ("best available data"). For (legal) policy formulation and the law in general it is important to not lose out of sight what is actually happening on real world markets,[288] which is a danger if highly abstract theoretical models are combined with highly complex quantitative empirical methods, as without a close analysis consistency of a model may be found, even though the current "best available empirical evidence" due to scarce data and methodological limitation often does not provide much evidence at all.[289] In addition, the claims made in this chapter based on the below marketing findings are quite limited; the marketing data is merely used to suggest that it is not services that the dealer desires, but instead price; the basic premise based on *Bork*, which also the prevailing view ascribes to, that the only plausible explanation of RPM when used by an individual supplier is that it increases sales, is not questioned based on the marketing literature below.[290] The findings are also not used alone, but are combined with other arguments that point into the same direction, in particular the argument that, if there were demand-increasing services for which extra-payment is needed, RPM is unlikely to be the most efficient contract enforcement mechanism.

As already argued above the use of the apparent likelihood standard provides a methodologically sound way to integrate the findings of this business literature, as it clarifies the weight the evidence is given and its position compared to the other more quantitative evidentiary techniques primarily used in economics. If we see how weak the economic evidence

[287] See above the analysis of Ippolito (1991) (chapter 2 III.C.).

[288] The claim that antitrust needs to become familiar with management/marketing studies is frequently made, in particular in view of 'brands'. See for example Desai and Waller (2015: 110) positing that "[s]cholars, practitioners, policy makers, legislators, and judges need to be as familiar with the literature and language of marketing and brand management as they are with different strands of economic thought" (with reference to Waller (337-338)). Similar Gundlach and Phillips (2015: 127).
It must be noted that the claim is not about substituting economics by management/marketing studies, but only about complementing it (similar Desai and Waller 2015: 109; "We are not calling for replacing the language of economics with the language of business literature. Economist is a vital and important language in the law, but it must be supplemented if we are to have a coherent legal regime with respect to brands.").

[289] Similar Desai and Waller (2015: 110) ("Survey data might be considered instead of or along with regression and simulation models.).

[290] Cf. the main conclusion below (section IV).

on RPM is that economists have considered "overwhelming"[291] and realize that the economic consensus' conclusion is mostly based on the logical assumption that from the discussed models, because the negative models are likely to be uncommon, the positive models must frequently apply, it should be a valid method to make use of the marketing literature, which in-depth analyses consumer behavior, in order to check whether the models are close to market realities. It thus is justified to examine and use the available findings from the marketing literature, which, even though it is not interested in the welfare effects of RPM, can contribute to the economics of RPM, where the applicability of a welfare model depends on a specific consumer behavior.

2. The structure of the argument

The 'apparent likelihood' of the service-related conditions in the positive models is examined in two steps. **Section II.B** surveys the marketing literature for findings on the relevance or likelihood of pre-sale services at the point-of-sale *in general*, which is relevant for all service-related positive models. As each model applies to a specific type of pre-sale service **section II.C** and **II.D** look at the relevance of the *specific type* of pre-sale services to which the specific model applies, distinguishing in particular between the free-rider models, on the one hand, and the Klein model, on the other. **Section III** then moves the focus away from the services to the question of the likelihood that RPM is an efficient mechanism to induce services.

B. Findings from the marketing literature regarding pre-sale services at the point-of-sale

This section is the first step in building the argument that the evidence from marketing research shows that the positive models are unlikely to apply, as it is unlikely that the supplier desiring RPM uses it to induce dealers to provide pre-sale services at the point-of-sale. It examines the marketing literature looking for findings on the likelihood that pre-sale services at the point-of-sale are crucial for consumer demand. The analysis is only the first step, as it is only looked at demand-increasing pre-sale services in general. For the positive models to apply these per-sale services must be either free-rideable (for the free-rider models to apply) or lack inter-retailer demand effects (for the Klein model to apply); and RPM must be the efficient mechanism to

[291] Wright (2009: 22).

induce the services. So the conclusion of this section that demand-enhancing pre-sale services are unlikely to be provided at the point-of-sale is just a first step in building evidence that the positive models are unlikely to apply and will be specified subsequently.

The marketing literature is replete with analyses of how consumer behavior has drastically changed through the emergence of the internet and how this makes necessary a drastically changed marketing strategy by firms necessitating drastically different approaches also in marketing research that require the development of new types of survey methods. Importantly, what is changing retail so drastically is not (at least not anymore) that consumers have the possibility to purchase a good online, i.e. that there are online shops that may divert sales away from traditional brick-and-mortar stores (including not only e-commerce but also mobile commerce). Online versus offline sales is not the relevant metric, but the growing influence of digital in the consumer-decision-making process is what changes the retail landscape so drastically.[292] If we look at the consumer behavior the marketing literature describes, it all seems to point into the same direction, namely that the salesperson at the physical store will rarely be a crucial factor in the consumer-decision-making process.[293] And it is this growing importance of digital sources, in particular of digital sources that are outside the supplier/dealer's immediate control, in the consumer decision making process that is the drastic change that needs to be considered with regard to the RPM models, as (in general) IT-enabled digital sources decrease the relevance of pre-sale services (including quality signals) at physical stores.

This is found to be a consequence of the emergence of the internet. The web with its abundance of accurate, up-to-date information, social networking and communication possibilities[294] is constantly and easily available to the consumer, in particular with the rise of mobile devices/appliances; through it the consumer is no longer restricted to what happens to be in front of her,[295] but she can make use of the web-enabled time-space compression and initiate a

[292] "Online and offline sales are not black and white and sales is too simple a metric to understand the relative importance of the internet", econsultancy (2016).
[293] See e.g. Kucuk and Krishnamurthy (2011: 54) ("In the purchase stage, the influence of the salesperson diminishes as the consumer initiates the purchase and the seller is replaced by a consumer-directed, unobtrusive, informational process.").
[294] See e.g. Kucuk and Krishnamurthy (2014) ("These information technologies have transformed consumers, corporations, and societies with widespread access to information, better social networking and enhanced communication abilities." (47); "Online, consumers can easily access more accurate, up-to-date information about products, companies and legal regulations from a vast variety of sources." (48)).
[295] Simonson and Rosen (2014) ("Today decisions no longer restricted to what happens to be in front of us.").

self-directed, unobtrusive information process whenever she wants wherever she happens to be,[296] which breaks apart the former sequential consumer decision process rendering obsolete the traditional model of the consumer-decision-making process formerly used as a conceptual tool in the marketing literature.[297]

The marketing literature describes in particular the following changes in consumer behavior due to the internet.

1. The changed consumer behavior

(a) Breaking apart the formerly sequential consumer-decision-making process

The search for information and inspiration on products is not limited to a stage in the sequential purchase decision process, i.e. not to a specific time in point or place, but gets broken apart and connected to other (social) activities. To clarify – the terms 'information and inspiration' are used here to signify that the search behavior that is described below is not only about 'hard information' on the physical specs/objective quality of the physical product, but also about the more emotional/subconscious aspects in the decision-making process.

Research shows, for example, that information and inspiration acquisition is not limited to a specific time in point connected to the purchase decision process, but fractured into many intent-driven small moments, with consumers accessing their smartphones throughout the day for a few moments, following up on bigger tasks such as information/inspiration acquisition, often closely connected to other (social) activities online (accessing social platforms, sharing consumption experiences etc.).[298] And even if they happen to be in-store, research shows, consumers turn digital for more information and inspiration; smartphones, as research shows,

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See also (Thompson (2003: 123) ("Time-space compression is hyper-intensified by advances in information technologies and the digital revolution. … … We can now 'virtually' be anywhere, and be 'virtually' anyone, at 'virtually' any time.").

[296] Kucuk and Krishnamurthy (2011: 54) ("In the purchase stage, the influence of the salesperson diminishes as the consumer initiates the purchase and the seller is replaced by a consumer-directed, unobtrusive, informational process.").

[297] See e.g. Simonson and Rosen (2014: 37) ("The sequential, phased decision process is becoming less common for certain segments"). Similar Nunes and Cespedes (2003: 3 (109?)).
In the traditional consumer decision model the purchase process typically begins when the consumer recognizes a problem (awareness); next, the consumer engages in information search and evaluates options (consideration), which then leads her to preferences and a purchase decision or, alternatively, a purchase delay.

[298] A google study terms these moments "micro-moments", finding inter alia that 90% of smartphone users have used their phone to make progress toward a long term goal or multi-step process while "out and about", information search among them (cf. Google/Ipsos study 2015). The managing of micro-moments is an online-marketing strategy primarily coined by google (just "google" it).

are used in-store increasingly not for simple price comparisons (i.e. not for figuring out where to buy the product), but to access information and get inspiration online.[299]

Marketing research also shows that information acquisition is not even necessarily connected to an identified need or specific purchase intention anymore, but has become an independent activity of many consumers, who keep track of products on an ongoing basis, often combining information acquisition with social/sharing aspects.[300] This means information about products is often gathered already before the consumer is aware of a specific need, so that once the intent to buy is formed, the decision is pretty much already made,[301] and in particular long before the channel where the purchase is ultimately made is entered (this breaks apart the old marketing model in which information was gathered only after a specific need was identified). The new role information/inspiration acquisition plays for the consumer is also reflected in that even post-sale consumers do not disconnect from the information search process, but stay connected to the same (often user-generated) sources, for example for troubleshooting advice or to share their consumption experience becoming information-providers themselves adding a new stage to the traditional consumer buying process model.[302] Correspondingly, a "search economy" has emerged in which consumer search for much more information than they used to, which is reflected in the unabated growth in online search volume.[303]

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[299] 82% of smartphone users turn to their phone to influence a purchase decision while in a store (Google/Ipsos study 2015).
Deloitte Study (2015: 6) "found that digital consumers are 30 percent less likely to use mobile devices to perform price comparisons in-store than they were a year ago. We believe this may indicate that consumers are using digital more for inspiration and idea generation earlier in their shopping process, and not simply as a price comparison vehicle."

[300] Simonson and Rosen (2014: 36): "… when high-quality information is so readily and cheaply accessible, some people don't see the need to postpone information acquisition until a specific purchase intention is formed. Instead … millions of people keep track of products on an ongoing basis."
The phenomenon has been termed "couch tracking", as "consumers acquire information on an ongoing basis from the comfort of their couch" (Simonson and Rosen (2014: 42)), and is considered to be "not an insignificant phenomenon" (Simonson and Rosen (2014: 36)), with millions of users on sites such as the Gadget websites gdgt.com, CNET, Gizmodo, Engadget, macrumors, The Verge, gadgetwise, PhoneDog.
Regarding the social aspects of information search:
Simonson and Rosen (2014: 36) note that often Facebook, Twitter, Pinterest are used to follow information sources on an ongoing basis and also point to (user-driven) gdgt.com (a "kind of a Wikipedia for gadgets crossed with a social network") as a prime example (Simonson and Rosen (2014: 41)).

[301] Simonson and Rosen (2014: 37).

[302] See Edelman (2010: 5), who terms this the „enjoy-and-advocate stage", in which „consumers [] talk[] about their purchases in social networks and post[] reviews online … [and] turn to review sites for troubleshooting.
See also Kucuk and Krishnamurthy (2011: 54) ("Online consumers can become extremely active in the post-purchase stage. Online communities such as epinions and the Internet Movie Database (www.imdb.com) organize review information systematically. Any product can berated and reviewed by one's peers.").

[303] Lim (2009: 8) ("Online searching is now the key activity of millions of consumers around the world and the sheer growth in online search volume continues unabated.") with further reference with empirical data.
See also Simonson and Rosen (2014: 37) finding that "consumers nowadays acquire more information than they used to".

(b) The new relevant sources outside the supplier and retailer's direct control

Not only makes the consumer use of the web-enabled time-space compression not confining the search of information to that one point in time and that one place, when she, having become aware of the need to purchase a particular item, visits the store (and even then enlarging her options in-store by using her smart phone to gather more information), but also using much more and different sources, in particular not only those offered by the different retail channels or the supplier directly.

Research also suggests that the consumer conducts her search much more actively and intentionally, using less incidental information, consciously picking pre-sale information from different sources including, but not restricted to, the different retail channels, being in charge of her source/media selection.[304] Consumers use not one, but several different sources for gathering information and inspiration,[305] among them – in addition to the more traditional manufacturer/retailer-controlled sites – expert reports, user reviews, social networks, (product-related) online communities, sites of bloggers, search engines.[306]

Indeed research shows that consumer decisions are increasingly influenced by sources, which are outside the firm's immediate control,[307] in particular (horizontally-generated) information provided by other consumers and information provided by independent experts is increasingly relevant for the consumer decision.[308] As through the new internet-enabled technologies consumers can easily connect with peers and create network effects, consumers participate in the information supply taking over tasks traditionally performed by companies;[309] correspondingly, user-generated content is found to play an increasingly important role in the consumer's buying decision.[310] The social aspects of connecting, of sharing consumption

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[304] Simonson and Rosen (2014: 37) noting that there is less incidental information as decisions are increasingly made as "a result of an active premediated search".
Kucuk and Krishnamurthy (2011: 54) noting that "the seller is replaced by a consumer-directed, unobtrusive, informational process"; Kucuk and Krishnamurthy (2011: 53) ("Consumers are gaining greater control over their media selection for purchase decisions.").
On the channel-hopping behavior of "research shoppers", who "research the product in one channel … , and then purchase it through another channel", see Verhoef *et al.* (2007: 129), though, as we will see below, information search is not restricted to the traditional retail channels as the consumer uses newly emerging digital information sources.

[305] Research done for Google in 2011 found that the average shopper consults 10.4 sources of information prior to purchase (Simonson and Rosen (2014: 14) citing Lecinski/Google study 2011.

[306] See e.g. Kucuk and Krishnamurthy (2011: 52).

[307] Christodoulides (2009: 143).

[308] Simonson and Rosen (2014: 117-118).

[309] Compare Kucuk and Krishnamurthy (2011: 51); Krishnamurthy (2001).
On the internet-based democratization of brand management, part of which is the internet-based democratization of information (in particular of information access, creation and dissemination) see Asmussen *et al.* (2013).

[310] See for example Edelman (2010: 3) ("In many categories the single most powerful impetus to buy is someone else's advocacy.").

experiences online are found to play an important role here.[311] This horizontal information creation corresponds with the worldview of digital natives;[312] what is valued is the richness and nuanced information other consumers' experiences can provide, which is derived in part from the large and diverse sample size.[313] Product reviews by independent experts or consumer testing organizations are also found to be increasingly relevant in the consumer buying-decision, as the web enables unprecedented access, compared to the restricted availability pre-internet through print media, to such product information, which focuses on the comparison of specs and objective performance, provided by experts.[314]

2. The implications for firms

Being a practical, applied science with the aim to produce marketing knowledge, the marketing literature examines the implications of the fundamental shift in consumer behavior for firms, more specifically for a firm's marketing. If we look at the implications proposed in the market literature, they point into the same direction, namely that the influence of the dealer at the physical store on the consumer's decision-making-process is not crucial for sales.

(a) The importance of user generated content

The facilitation of the creation and sharing of user generated content is identified as one of the key strategies for firms;[315] companies, so the conclusion marketing research draws for firms,

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Kucuk and Krishnamurthy (2011: 54) ("Online communities and opinion leaders play an important role in supporting the consumer purchase decision.").
Consumer confidence in consumer reviews is increasing. Simonson and Rosen (2014: 14-15) citing a consumer survey (Nielsen Global Trust Report 2011) in which 70 percent of consumers indicated that that they trust online reviews, an increase of 15 percent in four years.
See also Deloitte Study (2015: 17): Recommendations from a friend/family/known acquaintance (81 percent); Online reviews or recommendations from someone with social media circle (61 percent); Online review by someone the consumer does not know in real life (50 percent) influence the buying decision (more than content provided by retailer/manufacturers).

[311] Compare Christodoulides (2009: 142-143).

[312] "Digital natives view the world horizontally … They embrace the benefits of sharing … [and] … build solutions that are horizontal." Hierarchies, vertically-organized institutions (including the vertical distribution chain, vertical marketing). DeGraff (2014).

[313] Simonson and Rosen (2014: 117).

[314] Simonson and Rosen (2014: 15).
Simonson and Rosen (2014: 11) point out the "[u]nprecedented access to experts: At its peak in the 1990s, PC Magazine's circulation was 1.2 million copies. Today expert reviews are available to anyone who uses the Internet – more than 200 million people in North America".

[315] Christodoulides (2009: 142).

need to let go of the "hierarchical, one-sided communication model" and to replace the monologue they are used to having with many-to-many communication where consumers not only interact with the firm but also with others consumers.[316] Though marketing literature implicates this with regard to branding in general,[317] this is also true for more objective/hard information, as the example of Amazon shows. Amazon, originally an online retailer, today more of a platform/marketplace, is the prime example for a facilitator of information exchange between consumers (direct peer-to-peer communication through Amazon's Customer questions and answers-tool; customer reviews that are themselves reviewed; effective search tools to narrow down relevant reviews) and has become the digital source most often consulted (in particular at the start of the search).[318]

(b) The key to success: connectivity, technology and social networks

As digital provides a myriad of digital touch points at which the consumer can be provided with information and inspiration (in short: be influenced) before she ever enters the store, connectivity is found to become key – a deep connection between online and offline features, between the different devices the consumer uses,[319] between different platforms, between social networks and commerce.[320] (Retail) companies as a result need to become technology companies;[321] and, when wanting to benefit from social shopping dynamics/social selling, they

[316] Christodoulides (2009: 142) with reference to Hoffman and Novak (1996).
[317] See e.g. Christodoulides (2009: 142-3) noting e.g. that "[t]he brand manager who used to be custodian of the brand has now become a host whose main role is not to control (this is impossible) but to facilitate this sharing" (143).
[318] See e.g. Edelman 2010, 5 reporting the results from an empirical study ("At the evaluate stage, consumers didn't start with search engines; rather, they went directly to Amazon.com and other retail sites that, with their rich and expanding array of product-comparison information, consumer and expert ratings, and visuals, were becoming the most important influencers.").
See also ECC Köln (2015: 4).
[319] Data (wish lists, shopping carts) must be synced across devices (mobile/app to Web).
[320] Ecommerce in Europe is looking to China for blue prints, where connectivity in retail is much further developed. Compare the speech by Gentz, founder of Zalando, at Wired Retail: "In China, the online and offline world are deeply connected. Consumers can connect to WeChat - an IM platform similar to WhatsApp - and discuss fashion options with a stylist. They can then order in-app and expect a delivery as quickly as three hours later. "The platforms in China were so connected" … "So they're already able to deliver consumer experiences that are far beyond what we get in Europe." (Gentz Wired Retail 2015).
For how Zalando is developing towards this direction, see econsultancy 2016, where Zalando's current features, which are considered at the cutting edge of ecommerce, are described (Zipcart, an app for same day delivery (part of a developing app portfolio; bag and wish list synchronization across mobile app and web; barcode scanner and image recognition in app; personalized recommendations; shop the look feature and more).
[321] "We started as a fashion retail company. But now we're going to be a fashion technology company." (Robert Gentz, co-founder of Zalando, a multi-national ecommerce start-up, which is considered to offer a functionality on its web sites that is considered best practice/at the cutting edge of ecommerce. See econsultancy 2016 citing from Gentz' Wired Retail Speech 2015).

need to become (or get close to) social (platform) companies as well.[322] To create the consumption experience consumers expect a whole "ecosystem", which is one of the new catchwords marketers use, that must be created and synchronized.[323]

(c) Direct link supplier – consumer and new players

What is observed and described in the marketing literature is not only that the boundaries between different channels are vanishing,[324] but that the traditional retail value chain is broken apart, as new players push themselves between retailers and consumers connecting manufacturers (brands) directly with end consumers.[325] The enhanced communication abilities on the web (e.g. instant messaging) and the prevalence of digital touch points mean that manufacturers themselves get much closer to consumers without depending on retailers,[326] often with the help of the emerging new players (platforms in particular, review sites on e-marketplaces).

(d) The fundamental changes: loss of control and no need for compensation

The changes that marketing research suggests are necessary to a firm's marketing come with a power shift from companies to consumers. Firms lose control over the information and image of a product, as consumers are connected and influenced through the web, which is difficult to

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[322] "We don't ask ourselves if we're a social or a commerce company – we ask "What does the customer want?" Charlwin Mao, CEO of a Shanghai-based shopping app that, in just two years, has attracted 15 million consumers and $200m in annual merchandise sales by turning a social trend/shopping experience sharing app quickly into ecommerce platform, when noticing that users wanted to purchase directly over the social platform. See Wired Retail 2016 (30.03.2016).
In Europe social selling is not as far developed, attempts by Facebook and Twitter to integrate commerce into their platforms failed. Zalando is working on its social shopping features by tapping into the Instagram community (see econsultancy 2016).
Net-a-porter with its net set community is another example in the fashion sector.

[323] See e.g. Gentz (Zalando founder) in his Wired Retail Speech 2015 (Gentz Wired Retail 2015): "A company can't do this alone … but an ecosystem can. It involves stylists, access to a local inventory, delivery services and more."

[324] See e.g. Nunes and Cespedes (2003: 3/109): What has changed with the advent of the internet is "that customers today are no longer marching through those five stages in the context of a single channel … [but] are using all the available channels, entering different ones to fulfill their needs at different stages" . "They are breaking apart integrated product-service packages and then cherry-picking – that is, taking advantage of up-front information and support – without making the purchase the company counted on to subsidize them. Customers are no longer mindful of channel boundaries …. [but] … mindful of the value of individual components in [the different] channels".

[325] http://www.brickmeetsclick.com/warning--don-t-stay-locked-into-retail-s-traditional-value-chain-.

[326] Kucuk and Krishnamurthy (2011: 51) ("Due to the effective communication abilities of companies with their consumers, we now see disintermediation in many marketing channels."); id., at 53 ("The introduction of information technologies has made manufacturers focus more on consumers rather than middlemen (such as Dell Computer's elimination of middlemen-disintermediation)").

control for a firm.[327] This also leads to shifts in power and spending within companies.[328] The necessary changes are so fundamental in nature that the marketing literature has posed the question of whether traditional companies will be able to adapt.[329]

The loss of control over information and image components of the product comes with another change that can be observed and that is relevant for the applicability of the positive RPM models. There is very frequently no need (but also no chance) to compensate the retailer for the provision of demand-enhancing services; pre-sale services that influence consumer decisions are mostly provided without the need for monetary compensation. Through innovative formats the pre-sale service has become separated from the actual purchase, a compensation through making the sale is not necessary anymore. The marginal cost of an additional consumer using the information on a retailer's site for example is close to zero;[330] the consumer, when browsing the dealer's site, may even create value for the dealer, even if she does not buy the product over the site, namely by contributing reviews and leaving behind data, which the online retailer can mine for its own purposes.[331]

3. Analysis

The consumer the marketing literature describes and the implications it draws for the firms' marketing raise doubts as to whether it should be crucial for a supplier to induce pre-sale services by a dealer at the physical store. The consumer according to marketing research is

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[327] See e.g. Christodoulides (2009: 142) with reference to Bernoff and Li (2008) ("Such a community of consumers who use Web 2.0 applications to get the things they need from one another, rather than from companies, is further shifting the balance of power from firm to consumer".).
See also Kucuk and Krishnamurthy (2011: 53) ("The unprecedented access to information allows consumers to obtain a more balanced view, thus threatening company power.").
Kucuk and Krishnamurthy 2011 "argue that the Web altered the power dynamics in favor of consumers along four dimensions" examining ''Technologic'', ''Economic'', ''Social'', and finally ''Legal'' sources.
They note that "it could be argued that the consumer is the most powerful channel member [in the distribution chain]" (48) and point to other scholars that indicate the rise in online consumer power: Ettenberg 2002, Henshall 2000; Hoffman et al. 2004; Urban 2004 (47).
[328] In particular the roles of IT and marketing need to get connected within the company. E.g. Edelman 2010, 7 mentions the (observed) example of the creation of a "Digital Governance Council", led by the CMO and attended by the CIO.
With regard to spending Edelman (2010) notes that so far the focus of spending was on "paid media" (termed "working media spend", while now also "owned media (that is, the channels a brand controls, such as websites) and earned media (customer-created channels, such as communities of brand enthusiasts)" (3) need to be considered; so "an increasing portion of the budget must go to "nonworking" spend—the people and technology required to create and manage content for a profusion of channels and to monitor or participate in them." (4)
[329] See e.g. Christodoulides (2009: 141) ("The question is to what extent can traditional companies follow suit? Are they comfortable to cede control to consumers?").
Also Edelman (2010: 8) ("The changes buffeting marketers in the digital era are not incremental—they are fundamental.").
[330] Vezzoso (2014: 39); Gundlach *et al.* (2010: 421).
[331] Vezzoso (2014: 39); Gundlach *et al*. (2010: 421).

breaking free from the formerly adequately modelled sequential consumer-decision-making process, collecting information and inspiration on products anywhere and anytime, often connected with other (social) activities online and often from sources that are not directly controlled by the supplier or the dealer. When consumers are influenced/informed on the web, pre-sale services at the point-of-sale lose their relevance and the supplier itself gets the chance to directly connect with the consumer. It is difficult to see what type of service provision could be frequently so crucial to generate sales for the specific product of a specific supplier that it must be financed through for the supplier very costly RPM, in particular when in order for the models to apply those pre-sale services must at the same time also be either free-rideable or lack inter-retailer demand effects[332] and must be difficult-to-specify.[333]

This of course does not mean that there are no services that the consumer values at the physical store. The changes that digital has brought to the consumer decision-making process that are described above do not mean that physical stores become obsolete; indeed, consumers may still want to have the product instantly (online searches for local results are increasing[334]), e.g. pick it up locally or have it delivered from a local storage facility within 2 hours, or enjoy a particular shopping experience. The findings merely suggest that the traditional role of the retailer is drastically changing, as in the digital environment of today the web is where demand is created, where the consumer gets her information/inspiration/trouble-shooting help. What loses relevance is not the physical store as such but the influence the physical store can exert on the consumer's buying decision pre-sale. This makes it unlikely that the supplier should have an interest in paying through for him very costly RPM for pre-sale services at the store. It is exactly the services a supplier may want to pay for through RPM, namely those that increase the specific supplier's sales and influence the consumer to buy its product, that the consumer most likely will not value or not even consume at the physical store.

That the supplier itself has the chance to directly connect with and reach consumers is pointed out not to argue that the marketing literature knows better than the supplier how to increase sales. The argument I am building is not that instead of inducing pre-sale services at the point-of-sale through RPM a supplier should make use of the numerous digital touch points the

[332] On this below section II.C and II.D.
[333] On this below section III.
[334] Google et al. 2014, a study, found that 4 out of 5 consumers use search engines to find products, services or experiences nearby. When consumers are outside of the home, the majority of their smartphone searches are of a local nature. In fact, 56% of smartphone searches done on the go have local intent as do 51% of those done in-store.

internet provides. The argument is rather that in view of the findings from marketing literature it appears unlikely that it is pre-sale services at the point-of-sale that the supplier desires when he uses RPM and more likely that the supplier wants something else, namely directly the uniform price level, to increase demand.[335]

In addition it is important to keep in mind that the fundamental changes in consumer behavior described in the marketing literature do not apply in the same way to all product categories, or all consumers, or all buying situations;[336] they happen not evenly across the board, but depend on product segment, type of consumer and buying situation, as the marketing literature points itself out.[337] The described trends are nevertheless relevant, because they are rapidly spreading, applying to an ever-increasing number of consumers and products. This is so, because they are connected to the "culture of connectivity, of sharing, of feedback, of constant availability" of digital natives,[338] which represent a growing part of the population. In addition, digital technologies are rapidly developing and improving the online environment (better accessibility, new search engines, visualization methods etc.) and the rise of mobile devices and appliances continues.

This is kept in mind when the next section further examines this first impression by directly looking at the different types of pre-sale services to which the models apply, the free rider models requiring that these services are free-rideable, the Klein models that they lack inter-retailer demand effects.

C. 'Apparent likelihood' of the free riding models' conditions

This section uses the above findings of the marketing literature to estimate the 'apparent likelihood' or reasonableness of the conditions of the specific positive models to apply on real world markets.[339]

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[335] On the price-based RPM models see chapter 4. The thesis' main argument is that it is not pre-sale services the producer desires but a uniform price level.

[336] Simonson and Rosen (2014: 17).
Empirical studies thus often distinguish between for example "digital natives", consumers with/without online access, with/without smartphone; and different product categories.

[337] See e.g. Simonson and Rosen (2014: 17) ("… the trends … will not happen evenly across the board. … we don't expect these trends to apply in the same way to cars and toothpaste, to well-connected and to less connected consumers, and to decisions made with or without time pressure.").

[338] https://blogs.harvard.edu/youthandmediaalpha/projects/past-projects/digital-natives/.

[339] On the apparent likelihood/reasonableness standard as evidence see above I.B.

This must be done for each model individually. Although all positive models share several requirements, in particular that there must be pre-sale services, which are crucial for sales, difficult-to-specify and need to be provided by the dealer at the (physical) point-of-sale, the type of services to which they apply differs. This is in particular so with regard to the free riding models versus the Klein model, as they are based on different explanations for why dealers do not provide the desired services themselves and need additional incentives, namely either free riding or the lack of inter-retailer demand effects.

Before delving into the 'apparent likelihood' analysis it must be stressed again that the argument built up in this chapter is not that suppliers are wrong to desire to use RPM as the desired services are not crucial for sales. The argument is rather that the fact that it is unlikely that there are services, which fulfill all the conditions of the models, suggests that it is not services that the supplier desires to induce with RPM in order to increase sales. Rather, the supplier is interested directly in the uniform (high) price level, which it can achieve through RPM.[340]

1. The free riding models: information services

Under the free riding models the supplier uses RPM to induce pre-sale point-of-sale services to be provided by the dealer, which increase sales but are not provided by the dealer on its own initiative as they are subject to free riding; RPM is necessary as enforcement/payment mechanism because the services are so difficult to specify that they cannot be directly contracted for.

With regard to the free riding models the question thus is how likely, if we look to real world markets, it is that there are services that are subject to free riding and that at the same time are crucial for sales, must be provided by the dealer at the point of sales and are difficult-to-specify.

If we look at the type of services that could possibly meet these conditions, it can be said that all free riding models are about information; more specifically they are about closing an information gap that keeps the consumer from buying the product; thus the sought-for services mitigate an information asymmetry between buyer and seller with regard to the product thereby increasing sales. Depending on which of the free riding models we look at, RPM is used to

[340] On this see the next chapter, which explores the available price-based RPM models, which are completely ignored by the economic consensus.

induce the dealer to provide product information signals in different forms: tangible services in the Telser model, the intangible service of a store's general method of doing business as quality signal in the quality certification model, promotional efforts to acquaint consumers with a new product in the new entrant model. In contrast to the Klein model, in which the pre-sale services are directed at the more emotional / subconscious part of a consumer's decision-making process[341], in the free riding models the consumer intentionally/deliberately and consciously consumes the free information services before purchasing the product at another outlet, which does not provide the sought-for information services and thus offers the product at lower cost. RPM is used in an attempt to lock in the consumer into the channel at which the consumer acquires the information service; in particular, by preventing price competition incentives for the consumer to switch channel during the purchase decision process are diminished, the consumer pays for the pre-sale services by not switching channel.

This information economics-inspired perspective helps to define the potential applicability of the free riding models.

2. The 'apparent likelihood' of the Telser model's conditions

The Telser model is assumed to apply to tangible information services which are subject to free riding, increase sales, must be provided at the point-of-sale by the dealer and cannot be contracted for directly.

(a) Applicability pre-internet

Pre-internet those conditions were assumed to be satisfied in the case of services such as knowledgeable sales help, operational expertise, on-site product demonstrations and special showrooms.[342] That the demand of only a limited number of product categories critically depends on such in-store information provision (consumer education) was acknowledged early on in the economic literature.[343] Complex products, in particular technical and electronic

[341] On the Klein model (contract enforcement model) see below II.D.
[342] Ippolito (1991: 282-283); Pitofsky (2007: 67).
[343] See the often-cited passage of Pitofsky (1984: 29) cited above in chapter 2 II.A.1.(a)(i).
Pitofsky goes on to give the example of jeans asking "What are the services we are talking about in these cases? Take jeans. What services does Saks Fifth Avenue provide that K-Mart does not? In both stores, the jeans are laid on the table, customers take them to a dressing room, try them on, and buy them. Is it really plausible that Jordache

products, were considered the prime example for the applicability of the Telser model, with high-end audio equipment as a "high-tech, information-intensive consumer durable good" being considered "[t]he iconic free riding example"[344], food processors being mentioned as another "particularly clear example"[345].

If we use the terms used in information economics, one could say that potential applicability was assumed for a particular type of search goods,[346] namely those where consumers needed assistance in their information search through informed sales personnel that explains or demonstrates product features and/or particular amenities to try the product on or try it out with the assistance of the expert sales person. The provided services were about consumer education, they enabled the consumer to understand the product, its features, use and capabilities and thus to assess directly its (intrinsic) quality pre-sale. The product uncertainty at issue stemmed from the complexity of the product and the consumer's lack of expertise and could not be cleared with mere physical inspection, which also the discounter, which was assumed to be free riding on the services provided by the more traditional 'full-service' retailer, could offer.

Furthermore, it can be said that the Telser model in a sense fits the traditional consumer decision model, which we have encountered in the marketing literature above. In the traditional consumer decision model the purchase process typically begins when the consumer recognizes a problem (awareness); next, the consumer engages in information search and evaluates options (consideration), which then leads her to preferences and a purchase decision or, alternatively, a purchase delay.[347] This model of a sequential, phased decision process fits the Telser model, in which the consumer having recognized a need/want visits the dealer to get information

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is fixing the resale price at $32 and denying the product to K-Mart in order to induce Saks to promote services on jeans? I think not." (Pitofsky 1984: 29).
Scherer and Ross (1990: 551-552); Arquit (1991:452); Winter (1993: 69).
This gave the impetus to expand the Telser model first from tangible to intangible services, then later to the presumably broad contract enforcement hypothesis of Klein. On this above 2 II.A.1.(a)(i).

[344] Elzinga and Mills (2008: 1842). Similar Klein (2009: 438); Arquit (1991: 452).
Marvel (1994: 62-63) points to another "particularly clear example" for the free riding explanation, namely the food processors subject in *United States v. Cuisinarts, Inc*., No. H80-49 (D. Conn. 1980).

[345] Marvel (1994: 62-63) points to another "particularly clear example" for the free riding explanation, namely the food processors subject in *United States v. Cuisinarts, Inc.*, No. H80-49 (D. Conn. 1980).

[346] Goods can be classified according to their (dominant) information characteristics, i.e. according to how the consumer can gather information about their quality. Information on the quality of the "search characteristics" of a good can be obtained pre-sale through "search", in particular inspection; information about the quality of the "experience characteristics" of a good can be obtained only after post-sale through "experience", i.e. using the product; information about the "credence characteristics" of a good cannot be obtained (easily) even post-sale. The distinction between 'search' and 'experience' characteristics goes back to Nelson (1970) and Stigler (1961). Darby and Karni (1973) added the concept of "credence goods".

[347] Simonson and Rosen (2014: 37); Nunes and Cespedes (2003: 3 (109?)).

needed to decide about which product to buy and to have open questions about the product answered before making the purchase at another outlet, in particular online.

(b) Applicability in the search economy

(i) Fundamental changes in consumer-decision making

If we look at the consumer behavior described in the marketing literature, it can be doubted that the provision of information at the point-of-sale by the dealer is frequently crucial for sales. We have seen that the traditional sequential consumer-decision making process has been broken apart, as the information search due to the emergence of the web is no longer confined to a specific time and place. As the marketing literature shows, consumers make ample use of multiple digital sources, often combining information acquisition with other (social) online activities and often making use of and preferring horizontally-generated content or information of independent (expert) sources such as consumer test organizations, i.e. the information sources that are not directly controlled by the supplier/retailer.[348]

That the consumer described in the marketing literature should value the RPM-induced services at the dealer equal to or greater than the costs of supply,[349] which is a condition of the Telser model, can be doubted. Consumers in the search economy are much better informed today due to the constant availability of information and the decreasing search costs;[350] and even if arriving uninformed at a store are likely to turn digital using their smart phones to access information online, most often starting their online information search at Amazon.[351]

It is also unlikely that the supplier depends on the dealer for the provision of information and cannot provide the sought-for services itself; the old assumption that the dealer is closer to the consumer, to whose needs the advice must be tailored,[352] is not consistent with the reality of today. With the multiple digital touch points at which the consumer can be reached, for example on platforms, social networks etc., and the enhanced communication possibilities over the web

[348] On this see above section II.B.
[349] Klein and Wright (2007: 10-11).
[350] See e.g. Kucuk and Krishnamurthy (2011: 50, 52) ("The online consumer is tech-savvy, informed, connected, and has a solution-based living style."; "The Web has … increased consumer knowledge of products and services." ; "As a result of the advancements in information systems and search engine technology, consumers' search and transaction costs have declined.).
[351] On this above B.1.
[352] See e.g. Marvel and McCafferty (1984: 347) finding that "[t]he information provided by such demonstrations cannot be provided efficiently by manufacturers through alternate methods, such as advertising, because it must be tailored to the particular needs of customers".

(i.e. also two-way communication in particular instant messaging) the supplier can connect with the consumer and provide the desired information.[353]

Also the assumption that the dealer must be paid for the provision of information through an increased margin proves to be wrong in the digital environment, as seen above.[354]

(ii) Possible objection: The consumer confusion problem

While the increasing quantity of easily accessible information is undeniable, it has been argued that the quality of the information and the consumer's ability to handle the information needs to be considered as well. It has been argued by *Ippolito* for example that it cannot be assumed that the abundance of information on the internet makes information provision at the store irrelevant, because "more information is not necessarily better information".[355]

Again the marketing literature can provide some insights on that.

The marketing literature acknowledges that "[c]onsumers make better decisions with less information instead of stockpiling and analyzing vast amounts of data"[356] and that information overload and biased information may give rise to confusion.[357]

Regarding information overload the marketing literature suggests though that with the fast pace of innovation of new search and sorting tools [bots] consumers have sufficient support in filtering the abundance of information;[358] "shortcuts" such as review summaries, bottom-line lists of pro and con, review filter,[359] star ratings let consumers easily narrow down the

[353] See above II.B.2.(c).
[354] See above II.B.2.(d).
[355] Ippolito (2010: 157).
[356] Kucuk and Krishnamurthy (2011: 54) with further references.
[357] Kucuk and Krishnamurthy (2011: 53-54) note that "[t]he surplus of information on the Web gives rise to confusion along three dimensions—first, attribute-based information [] indicates information overload about specific product features; second, alternative-based information [] indicates information overload about product alternatives and finally, information correctness—unbiased information which indicates false information about products/services." (References omitted).
[358] Simonson and Rosen (2014: 35, 67) ("ongoing development of additional tools that help consumers succinctly but rather accurately assess overall product quality or certain features of interest without having to delve into all the details and sources") referring for examples to http://www.absolutevaluebook.com/#!new-quality/c1awz.
[359] Simonson and Rosen (2014, 34-35). The example they give for a filter to sort quickly through an abundance of reviews narrowing the list down to the reviews most relevant for the specific consumer is the filter function for reviews at Sephora.com: "A customer doesn't have to read through 659 pages of reviews of Bare Minerals SPF 15 Matte Foundation. Instead, she can focus on only those reviews written by consumers with dark skin and brown eyes, for example, by clicking on these two filters."

information to the amount that fits their needs.[360] It also points out that some empirics even suggest that the information overload problem has never been that severe to begin with.[361]

Regarding information correctness and credibility of sources the marketing literature suggests that there are sufficient checks and balances to keep information unbiased and sufficient help for consumers to identify biased information.[362] Learning theory, which states "that as individuals (or organizations) get more experienced at an identical or similar task they become more efficient at it" supports the finding that consumers are getting better in filtering out the accurate information,[363] while at the same time emerging technologies make filtering easier.

So the problem of potential consumer confusion and/or biased information seems not to be so crucial that a different conclusion with regard to the relevance of information services at the dealer must be reached.

(c) Applicability to different types of product uncertainties

As pointed out above, it must be kept in mind that the changes in consumer behavior do not happen evenly across all product categories.[364] Digital information may not be a feasible alternative to information provided at the physical store for all types of products. Take digital cameras and mattresses - how the consumer reaches her decision within each of the product categories differs depending on the source of (product) uncertainty, a different type of uncertainty will have to mitigated. In order to further strengthen the argument that the information-based free rider models are unlikely to apply, this section thus looks at different

[360] Simonson and Rosen (2014: 67) ("Most consumers are likely to find the information equilibrium that fits them, the amount of information they feel can help them make better decisions".).
[361] Simonson and Rosen (2014: 35) citing Scheibehenne *et al.* (2010: 421), a meta-study, which combined the results of fifty choice overload experiments and concluded that "adverse effects due to an increase in the number of choice options are not very robust", that"[t]he overall effect size in the meta-analysis was virtually zero".
[362] See on this in general Simonson and Rosen (2014: 44-56). In particular they point out that "the reviewers are under review as well" (52), that a biased/bribed blogger, a review site that does not curb manipulation (through algorithms that filter out fake reviews) will lose viewers that will migrate to the more trusted sources. With the growing participation in review systems gaming the system becomes impossible (46, 54).
The accurateness of user-generated reviews is supported by empirics (Simonson and Rosen (2014: 54-55) with further references).
Kucuk and Krishnamurthy (2011: 54) point out that "[c]ollaborative filtering (evaluation of information within online communities and discussion boards) is important support for consumers' decisions, and can help decrease confusion".
[363] Kim and Krishnan (2015: 2453) with further references. Kim and Krishnan (2015) apply learning theory to the specific problem of filtering out and interpreting digital information for making a purchase without experiential information.
[364] See e.g. Simonson and Rosen (2014: 17) ("… the trends … will not happen evenly across the board. … we don't expect these trends to apply in the same way to cars and toothpaste, to well-connected and to less connected consumers, and to decisions made with or without time pressure.").

types of product uncertainties, which may be mitigated through RPM-induced services to determine, if there are uncertainties that can only be mitigated through information at a physical store.

In general, the one thing the consumer cannot be provided with virtually through the web is the possibility to interact with and inspect the product in person. The question thus is, if the spatial and temporal separation between buyer and product may in certain product segments make point-of-sale information through the dealer necessary. This question is examined by using different types of product uncertainties in the online environment, which have been developed in the information systems literature.[365]

Loosely based on the information systems literature, the following dimensions of product uncertainty in the online environment can be identified.

(i) Product **description** uncertainty, information loss from omission of physical inspection: **low**

Here consumers are uncertain about the objective, physical quality of the products and the source of uncertainty is the product's complexity and the consumers' lack of expertise.

It is very likely that consumers turn digital where they very likely find better, more-up-to-date information less costly and more conveniently, provided through IT-enabled solutions such as Online Product Presentation Formats, Decision Support Systems, Online Product Forums, Computer Mediated Communications.[366]

Technical, electronic products such as digital cameras are the prime example for this product category. Marketing studies frequently show that digital influence with regard to technical products is highest, similarly the numbers of online sales are particularly high in this category.[367] This has been explained inter alia with the high rate of technological change (online content regarding products with a high rate of technological change is perceived as more-up-

[365] A strand of the newer academic business discipline of information systems (IS) research examines how the spatial and temporal separation between buyers and products can be overcome with IT-enabled (and other) solutions. In order to make possible the development and design of effective IT-enabled solutions this strand of the literature examines consumer uncertainties in the online environment conceptualizing them as information asymmetry problem. See e.g. Dimoka et al. (2012: 3); Pavlou et al. (2007: 105).

[366] Hong and Pavlou (2010: 5ff.) analyze these types of uncertainty-mitigating IT-enabled solutions.

[367] According to a Deloitte Study (2015: 11) 62 percent of electronics in-store sales influenced by digital (as opposed to for example only 31 percent of food sales influenced by digital).
HDE Study (2014) (as cited by Friederiszick and Glowicka: (2016: 47)) found that products of the category 'Electronics & technics were most often sold online compared to other product categories. (29% of sale in 2012 and 2013).

to-date than information in-store) and the specification-based objective features (increase of the transferability of information from one source to another)[368].

(ii) Product **description** uncertainty, information loss from omission of physical inspection: **high**

In this category the product has characteristics whose quality can be ascertained only through physical inspection, in particular touch, smell; it is still about objective quality though, not subjective. An example is the softness of a fabric.

As long as it is about objective quality, the in-person sensory experience can be substituted by digital information quite easily, in particular description formats and third party sources (sensory experiences of other consumers compiled in consumer reviews combined with search functions). Generous return policies can also mitigate this type of uncertainty and may be less costly than using RPM to get dealers to provide the consumer with a possibility to inspect the product at a store.

(iii) Product **fit** uncertainty, information loss from omission of physical inspection: **low**

Another source of product uncertainty is the consumers' "inability to match their preferences with the product's attributes"[369]. The consumer here needs information regarding whether the product's attributes fit the consumer's subjective needs and preferences. This "fit" uncertainty does not stem from the loss of experiential information, i.e. the omission of physical inspection. Consumers here are uncertain about their valuation of the objective product quality. Even if the consumer knows the objective quality attribute of the products, she may not know how much she should value quality,[370] how much weight she should place on each attribute.[371] For example, if a consumer compares two options of digital cameras, one has an objectively better zoom than the other – how much should she in her specific situation desire the better option or what zoom would be useful for her specific purpose?[372]

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[368] On the justification see Baal and Dach 2005.

[369] Hong and Pavlou (2014: 2); also Hong and Pavlou (2014: 4): "Product fit uncertainty is proposed to reflect the consumers' difficulty in assessing the fit between the product's attributes and their own preferences … .").

[370] Kuksov and Lin (2010: 123).

[371] Kuksov and Lin (2010: 122).

[372] Kuksov and Lin (2010: 122) give the example of a soccer mom buying a digital camera to capture her kid on the soccer field:

"Imagine a soccer mom considering a digital camera purchase. After some research she identifies several options, among which there is a more expensive cam- era with 4 χ optical zoom and a CMOS (complementary metal oxide semiconductor) element and a cheaper camera with 3 χ optical zoom and a CCD (charge-coupled device) element. One can think of the following two dimensions of the uncertainty that the soccer mom is still facing in her choice.

The information signal necessary here must be tailored to the consumer's specific purposes/needs, which is different from the information signals necessary to mitigate objective product quality uncertainty.

This uncertainty cannot only be cleared through in-person communication with a retailer in a physical store. IT-enabled tools can provide information signals that are responsive to the specific need of the consumers through either enabling two-way-communication between seller/buyer, for example via Instant Messaging (IM) (computer-mediated-communication), i.e. shifting the interaction between the seller from the store to online, or between buyer/prior customers (direct communication through customer questions & answers function, e.g. at amazon.com; social networks in general). Access to a large pool of prior consumers' (static unresponsive) reviews with a good search function[373] can also mitigate this type of uncertainty.

(iv) Product **fit** uncertainty, information loss from omission of physical inspection: **high**

The source of product fit uncertainty can also be directly and solely the loss of experiential information. In the offline environment this type of uncertainty is resolved by physically interacting with the product in person in the store.[374] The main example here is apparel, shoes, and accessories – any good for which a simply try on/ physical inspection can solve the fit uncertainty.[375]

Though at first sight, this may be a product category where RPM-induced dealer services may remain relevant, this is not necessarily the case. Although fashion (clothing, shoes) is a category, in which objective, spec-based quality often plays a minor role so that information is less transferable, and in which in addition (subjective) product fit is key as the consumer needs to try on the product, online purchases are rapidly growing.[376] This can be explained with the

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First, is a CMOS or a CCD sensor an objectively better attribute? Second, even if it is clear which camera has a better attribute, as is the case with 3 χ versus 4 χ optical zoom, how much should she desire the better option? In this example, what zoom would be useful for her to take good pictures of the soccer games (specifically, is 4x zoom better than 3 χ zoom by $100 for this specific use)? Whereas the first type of uncertainty (122) is about the physical quality of a product, the second one is about the weight a consumer should place on each attribute. Resolving each type of the above uncertainty may affect the consumer's choice and, hence, a firm's profits."

[373] See e.g. sephora.com.

[374] Cf. Hong and Pavlou (2014: 7).

[375] See Gu and Tayi (2015: 255).

[376] Bundeskartellamt (2013: 16).

Compare also Barbaro 2007 (as cited by Kim and Krishnan 2015): "For the first time since online retailing was born a decade ago, the sales of clothing have overtaken those of computer hardware and software, suggesting that consumers have reached a new level of comfort buying merchandise on the Web. In 2006, revenue from skirts, suits and shoes reached $1803 billion, surpassing that from PCs, printers and wordprocessing programs, which totaled $1702 billion, according to a report to be released today by a major trade group."

rapidly emerging innovations of IT-enabled solutions to the "fit" problem[377] and the design of effective return policies, which can solve the uncertainty regarding fit. Online communication between buyer and seller (e.g. the chat function on hm.com) or generating and making accessible prior consumers' feedback regarding fit (see e.g. Zalando.de, esprit.com) help to mitigate this type of uncertainty. In addition this is a category where social dynamics/social selling plays a key role for many consumers.

More importantly, what seems to be required here from the dealer is not much more than the mere stocking of the product that enables the consumer to try the product on. This is not a service that is difficult to specify, which is another condition for the model to apply.[378] Directly contracting on this service and paying the dealer for it appears to be possible here and less costly than RPM. Thus in this category where the information loss from physical omission is highest, RPM is very likely not necessary, as here the service can be easily specified and thus contracted for directly.

(v) Conclusion

If we look at the relevance of free-rideable dealer services at the point-of-sales from the perspective of the different types of product uncertainties that must be mitigated to generate sales, the conclusion remains the same. It is highly unlikely that there are free-rideable services that must be provided by the dealer at the point-of-sale and for which RPM is necessary as enforcement mechanism.

This is true in particular, if it is kept in mind that the Telser model, as discussed below, is only applicable to difficult-to-specify services. The services, which may be most problematic for substitution through IT-enabled solutions, regard the information that is lost through the omission of physical inspection. The dealer services necessary for this are not difficult-to-specify, as it is mainly about stocking the product and providing the possibility of physical inspection, which the dealer can be paid for directly. In addition, there is the possibility of effective return policies.

[377] Compare Hong and Pavlou (2014: 2) ("Astute Venture Capitalists (VCs) also noted consumer-product fit as the next big thing for e-commerce; this is reflected by VCs' high interest in firms that seek to reduce product fit uncertainty with Internet-enabled tools" with reference to ifeng 2010, TechCrunch 2010.commerce; this is reflected by VCs' high interest in firms that seek to reduce product fit uncertainty with Internet-enabled tools").
[378] On this below III.

3. Other free riding models

This section applies the 'apparent likelihood' standard to the remaining free riding models, i.e. it shortly examines how likely it is that the conditions of the other free riding models, in particular the new entry model and the quality certification model are frequently satisfied on real world markets. It argues that it is unlikely that the use of RPM can be explained with the desire of the supplier to induce the dealer to provide pre-sale services in form of promotion efforts or quality certification through stocking the product.

(a) New entry model

As seen above a specific area of application for the Telser model are new entrants (facilitating market entry model); RPM is assumed to be necessary here to obtain the increased level of promotional efforts from a dealer that are necessary for the market entry of an unknown product.

But also here the trends described in the marketing literature make it less likely that this model frequently applies.[379] The tech-savvy, informed consumer the marketing literature focuses on can be easily reached by the manufacturer itself at one of the many digital touch points the consumer can be found at. The web makes it not only easier for manufacturers to reach consumers, but it also accelerates word-of-mouth through sharing on social platforms etc. That the (RPM-induced) services at physical stores are not necessary for a successful launch can be seen from the (originally exclusive) online launch of Amazon's e-reader kindle[380]; that not much promotional investments are necessary for a successful launch can be seen from the success story of the ASUS' Eee PC reader.[381] The web also creates new forms of cost-efficient market entry, innovative tech-focused retail formats in form of platforms that wedge themselves

[379] A similar argument is made by Vezzoso (2014: 38), who points to the example of the Kindle e-reader (see next Fn.).
Cf. also American Antitrust Institute (2009: 8) rejecting the new entrant model using the argument that "rather than relying on dealers to create demand, manufacturers may create demand for a new product themselves, through advertising or other consumer-directed marketing".

[380] Vezzoso (2014: 38) ("The Kindle e-reader itself [] could represent a very good example of the Internet having at least diminished the importance of knowledgeable retail staff in guiding the choice of novel or complex information-sensitive products. Originally, Amazon's dedicated e-reader was sold exclusively online, becoming quite popular without any live retail assistant or dealer demonstration. Amazon displays information on Kindle's full features and specifications on its website, and adds professional and customer product reviews. If early purchasers were possibly the more IT-savvy ones, later adopters have the additional benefit of previous users' reviews."

[381] On ASUS' Eee PC launch see Simonson and Rosen (2014: 16) ("Not long after the Eee PC shipped you could easily find information about it on blogs, review sites, and in mass media.").

between retailers and consumers creating a direct link between manufacturer/brand and consumers; start-ups can for example market their products easily over Amazon Launchpad.[382]

It is thus unlikely that RPM is used to induce dealers to provide promotional services for new products, as the dealer at the point-of-sale appears not to be crucial for market entry in consumer good markets in view of the possibilities of promotion in the digital environment.

(b) Quality certification through dealer reputation

Though also the prevailing view mostly assumes the quality certification model to be not frequently applicable, it should be added here that in the online environment, also this free riding model loses its relevance.[383]

In contrast to the Telser model, which concerns search goods, the quality certification model concerns experience goods, whose quality cannot be ascertained by the consumer herself pre-sale; a quality signal is necessary, dealer reputation is used as quality proxy.[384]

If we look at the digital consumer described in the marketing literature, who is increasingly the norm, it seems unlikely that the stocking of a product by an offline dealer should be frequently crucial for sales. First, and we will come back to this when looking at the almost identical, though price-based, quality signal model by *Inderst*, the relevance of extrinsic or relative cues such as dealer reputation as quality signal is decreasing, as consumers are better informed directly about intrinsic quality. Second, if we look at the described consumer behavior it appears

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[382] Amazon Launchpad is "a new program that makes it easy for startups to launch, market, and distribute their products to hundreds of millions of Amazon customers across the globe. The program offers a streamlined onboarding experience, custom product pages, a comprehensive marketing package, and access to Amazon's global fulfillment network, all geared toward helping startups successfully launch their innovations and share their stories. With Amazon Launchpad, startups can overcome many of the challenges associated with launching new products by using Amazon's retail expertise and infrastructure to create awareness and drive sales." http://www.businesswire.com/news/home/20150728005455/en/ (last accessed 04.04.2016).

[383] Arguing the opposite: Ippolito (2010: 158) who is of the view that the internet makes free riding on dealer certification services easier as well, as "a visit to the certifying retailers' Web sites may be sufficient to determine which goods are carried by high-reputation outlets".
See for the prevailing view Klein (2009: 434), Klein and Murphy (1988: 289) finding the model not a plausible explanation as RPM is mostly used by established brands; at other places though, it is assumed that one or the other positive model will apply, that all taken together can explain the use of RPM frequently, so also the quality certification model is considered a plausible explanation, see e.g. Lambert (2010: 185).
On Lambert's examination of the 'apparent likelihood' of the positive models' conditions see above chapter 2 III.B.2.(b).

[384] This model corresponds to the price-based quality certification model of Inderst, at which we look below (chapter 4 II.); the difference merely being that here the store, its general method of doing business, its stocking of the product, i.e. a service is the quality signal; while in the Inderst model the retail price itself is the quality signal.
Compare Marvel and McCafferty (1984: 350) ("The manufacturer's problem is [] that consumers will underestimate quality unless provided with some form of certification.").

much more likely that consumers turn digital for such extrinsic quality cues, where the consumer has access to the past experiences of others, where, even if the decision is more about taste than functional quality of a product, she finds tools that allow her to find large groups of people who share her taste.[385]

In particular if we look at what was assumed one of the main areas of applicability, namely fashion / apparel, the argument being that dealer reputation can help consumers to keep up with fashion trends, marketing research shows that fashion is one of the categories in which – despite subjective product fit uncertainty being a possible hurdle[386] – online sales are rapidly growing. Social dynamics play an important role here, sharing on platforms such as Instagram etc. as can be witnessed from the shifts (online) fashion retailers are going through in an attempt to profit from social selling aspects.[387]

4. Conclusion / Difference to Lao's argument

The analysis of the 'apparent likelihood' or reasonableness of the conditions of the free riding models suggests that they are uncommon, i.e. will rarely be satisfied on real world markets. This is in particular so as the marketing literature with regard to information-related services suggests that consumers mostly use digital sources to acquire (hard) information about products. Again, as also noted above, this is not to say that the physical store itself loses its relevance, only that the salesperson will rarely be needed to close an information gap that prevents the consumer from purchasing a product.[388]

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[385] Compare Simonson and Rosen (2014: 14).

[386] On the different product uncertainties see above section II.C.2.(c).

[387] On the move towards social platforms: "We don't ask ourselves if we're a social or a commerce company – we ask "What does the customer want?" Charlwin Mao, CEO of a Shanghai-based shopping app that, in just two years, has attracted 15 million consumers and $200m in annual merchandise sales by turning a social trend/shopping experience sharing app quickly into ecommerce platform, when noticing that users wanted to purchase directly over the social platform. See Wired Retail 2016 (30.03.2016).
In Europe social selling is not as far developed, attempts by Facebook and Twitter to integrate commerce into their platforms failed. Zalando is working on its social shopping features by tapping into the Instagram community (see econsultancy 2016).
With the demanded connectivity technology becomes key.
"We started as a fashion retail company. But now we're going to be a fashion technology company." (Robert Gentz, co-founder of Zalando, a multi-national ecommerce start-up, which is considered to offer a functionality on its web sites that is considered best practice/at the cutting edge of ecommerce. See econsultancy 2016 citing from Gentz' Wired Retail Speech 2015).

[388] On this above II.B.3.

It should be noted that a similar argument has been made by *Lao*, who points to empirical marketing studies on the digital influence on offline sales,[389] all of which find a very high percentage of offline (in-store) sales to be conducted after searching information online, more than online sales conducted after in-store research;[390] some distinguish between product category and consumer type.[391] But *Lao's* argument is not as strong as the argument build here, because she uses a few marketing studies on one fact in isolation without drawing a broader picture of consumer behavior, without bringing together different observations of marketing research under the umbrella of the apparent likelihood/reasonableness standard.

It is risky to merely point to these studies in isolation. To rely on numbers on one specific aspect is apt to raise resistance from economists, who can quickly point out that these studies are far from being robust and lack rigor. This is the argument with which *Ippolito* has quickly rejected *Lao's* claim that based on these studies it can be shown that free riding on in-store service

[389] Lao (2010: 491), (2011: 2, Fn. 10; 5, Fn. 26) points to the empirical marketing studies cited by Gundlach et al. (2010: 394-395). These are the following studies:
Zhang et al. (2009:6), who report on a IBM Study (2008); Verhoef et al. (2007), who present own findings and report on a Doubleclick Study (2011); National Retail Federation (2007), which reports on a survey conducted for the Retail Advertising and Marketing Association (RAMA) research study; Van Baal and Dach (2005).
Similar studies are cited in the vertical restraints debate more generally in OECD (2013: 80) (citing a 2011 Civic Consulting Study) and OECD (2013: 112) (citing a DB Study).
Similar but without citing evidence Harbour and Price (2010: 332-333) ((“Today, consumers can obtain far more extensive and valuable product information on the Internet, which has a profound impact on traditional free-riding arguments. To the extent that free riding is a legitimate concern, almost all retailers (virtual and bricks-and-mortar alike), as well as manufacturers themselves, are now free riding on the Internet's information superhighway. … … … “).

[390] Zhang *et. al.* (2009) are citing an IBM study from 2008 which states that 78% of responders conducted online search before offline sale versus 8% vice versa (offline search before online sale); Verhoef et al. (2007, 129, 130) cites a study by Doubleclick which found out that 43% of shoppers search online, but make their final decision at brick and mortar stores versus 16% of shoppers are offline searching and finally buy online. Verhoef *et al.* (2007, 144): “[O]ur findings replicate previous studies, in that we find that Internet⇒store research shopping is the most common form of research shopping.” RAMA (2007) reports that 92.5% of 15,000 consumers reported “regularly or occasionally research[ing] products online before buying them in a store”.
OECD (2013: 80) reporting that the Civic Consulting Study (2011) found that 49% of offline shoppers used at least one online research method.
OECD (2013:112) reporting that the Deutsche Bank Research (2011) found that “the impetus generated by information gathered on the internet to purchase goods in offline stores is six to ten times the (turnover) value of the impetus generated by information gathered offline to purchase on the internet”.

[391] See for example the following more recent studies:
ECC Köln (2015), a cross-channel study: Almost 40% of sales in brick-and-mortar stores are conducted after information search online; Of Smart natives (20-25 yr-old), 54.7% prepare offline sales online; of consumers with online access (“onliner”) 38.5% of offline purchases are prepared online.
Deloitte (2015: 7): 49% of consumers were influenced by digital data before they made an in-store purchase. Digital influence varies over categories: (Deloitte Study 2015, 11): Electronics 62%; Home Furnishings 59%; Automotive 55%; Baby/Toddler 52% (%of sales).
Similar empirical results are cited by Gundlach *et al.* (2010: 394-395), who refers to several studies from 2007 and 2008.
See also OECD (2013: 80) citing a 2011 study by Civic Consulting according to which nearly one in two offline shoppers (49%) used at least on online research method.
More studies with similar results can be found in Verhoef et al. (2007: 129).

provision is an infrequent occurrence.[392] It is important to take the findings from marketing research for what they are, namely no more than often very accurate anecdotal evidence. This is not to say that survey-based marketing studies are not useful, but they need to be put in context; for example, those numbers are useful to confirm the findings from marketing research described above, but standing alone they do not provide strong evidence. It also seems to be important to be more explicit about the type of evidence used, i.e. clarify that the marketing research is integrated into a broader apparent likelihood analysis. The use of this particular type/standard of evidence can then be justified as done above.[393]

In addition the studies cited by *Lao* appear to measure the wrong variables for the argument made. It is not about which channel has provided the information that led to the sale and now needs to be provided with compensation because the consumer switched to another channel. In the digital environment information acquisition and provision has become separated from the actual sale, the consumer uses a myriad of digital sources, many of them horizontally-generated, some paid for by leaving behind data, information acquisition becoming part of other (social) online activities. Through the web-enabled time-space compression the consumer can be virtually anywhere at any time, the assumption that information acquisition in the digital environment remains connected/ confined to different retail channels is unrealistic. Indeed this is one of the challenges that the new consumer behavior puts to traditional marketing research, as marketing scholars themselves recognize; consumer preference formation is based on a highly dynamic and unpredictable information acquisition process that cannot be modelled in a controlled experiment or through surveys so that reliable or even robust empirical findings are hard to come by.[394]

D. 'Apparent likelihood' of the Klein model's conditions

This section analyses the 'apparent likelihood' or reasonableness of the conditions of the Klein model. The Klein model applies to services which are crucial for sales, difficult-to-specify,

[392] Ippolito (2010: 156, 157) considers it a "myth" pointing out that "this is an empirical assertion that has little evidentiary support" and that "[w]hether free-riding has grown or diminished, and whether or not it is a substantial reason producers might use RPM in particular markets, are interesting research questions, but at this point there is little evidence to conclude that free riding is unimportant …".
[393] On using the apparent likelihood standard see above I.B., on the use of marketing literature (in combination with the apparent likelihood standard) see above II.A.1.
[394] See on the challenges the new consumer behavior poses to marketing research techniques Simonson and Rosen (2014: 147-162).

must be provided for by the dealer at the (physical) point-of-sale and lack inter-retailer demand effects.[395] Due to the fact that, in contrast to the Telser model, the services must lack inter-retailer demand effects, the Klein model applies to very different pre-sale services than the Telser model, which is why it is important to analyze the 'apparent likelihood' separately from the Telser model.

1. The 'apparent likelihood' analysis of the prevailing view

As seen above the prevailing view stresses the broad applicability of the Klein model by emphasizing how it is applicable where free riding is not an issue. As the prevailing view mainly relies on this model, it examines itself the 'apparent likelihood' of the model's conditions in more depth than it does with regard to the free riding models.[396] But, as seen above, the prevailing view mainly focuses on only one condition of the model showing that the incentive incompatibility, on which the model depends, can be frequently assumed in case of highly differentiated, branded goods.[397] What is ignored is that the incentive incompatibility between supplier and dealer, which is found to frequently exist, exists only with regard to services that lack inter-retailer demand effects; at the same time, for the model to apply, these services must be crucial for sales and it must be necessary that they are provided by the dealer at the point-of-sale and they must be difficult-to-specify so that it is impossible to contract for them directly.

2. The type of services at issue

In contrast to the free riding models the Klein model applies to a fundamentally different type of pre-sale services; services that lack inter-retailer demand effects are very different from services that are subject to free riding. This becomes clear if we look at the two scenarios to which according to *Klein* his model is applicable.

[395] See the description of the Klein model above chapter 2 II.A.1.(b).
[396] See the prevailing view's 'apparent likelihood' examination above chapter 2 III.B.2.(b).
[397] See above chapter 2 III.B.2.(b).

Klein points to two type of services, namely preferable or prominent display (positioning) and increased sales person efforts, which according to him lack inter-retailer demand effects and are crucial for sales in two situations.[398]

The first buying situation, to which the model is assumed to apply, are "impulse sales", which *Klein* defines as a situation, in which "the consumers have no prior intent to purchase the product, but do so after receiving point-of-sale promotional services such as observing the product in a prominent display"[399]. *Klein* explains that in this impulse buy scenario consumers purchase the product only because they notice (or are differently steered towards) it, while shopping for something else.[400] Boxed candy, prominently displayed, is given as example.[401] As the consumer did not know he would buy the product, when he entered the store, the promotional effort, which induced the impulse to buy, has no significant inter-retailer demand effect. *Klein* finds the model also applicable in a second buying scenario, namely "when consumers have a prior intent to purchase a type of product, [but do] not know what brand of the product they wish to purchase"[402]. The example given is that of apparel in a department store, where the consumer is convinced by a sales person to buy a particular piece of clothing.[403]

If we look at those two stipulated scenarios, what becomes clear is that it is not merely about the same promotional sales efforts, which the free riding models are about, although this is what is often suggested.[404]

The 'impulse sales' scenario is not about mitigating an information asymmetry between consumer and supplier about the product; it does not concern the (in the free riding models) deliberate acquisition of information about the product pre-sale but rather the 'formation of want' stage of the consumer decision making model. Also the services in the second Klein scenario, where the consumer does not know yet which brand to buy and is persuaded by promotional sales efforts at the point-of-sale, differ from the pre-sale services of the Telser model. As the sales efforts in the Klein model must lack inter-retailer demand effects, i.e. while they are able to persuade the consumer to buy the specific product, they cannot draw customers in from competing (retail) stores, these services are not about information or the deliberate

[398] On this see Klein (2009: 441-442) and Klein (2009a: 17-18).
[399] Klein (2009a: 17-18).
[400] Klein (2009: 441).
[401] Klein (2009: 441) with reference to *Russel Stover Candies, Inc.* 100 F.T.C. 1 (1982) 441.
[402] Klein (2009a: 18).
[403] Klein (2009: 442).
[404] See for example Klein (2009: 442) ("Retailer promotional efforts devoted to a manufacturer's products are the type of retailer service described in the standard free-riding analysis.").

decision-making process. If they were, if for example the premium positioning of a dealer would be considered to be a quality signal (=information), then it could draw in consumers from other stores (premium shelf space as quality signal, so to say). But this is not what the model is about; as the desired services must lack inter-retailer demand effects, as otherwise no incentive incompatibility would exist, those services can only be about 'subconscious appeal', not information.[405]

3. The 'apparent likelihood' of the 'impulse buy' scenario

If we look at *Klein's* 'impulse buy' scenario, this seems to be quite a narrow condition that cannot account for a broad applicability of the model.

How frequent are impulse sales really, in particular impulse sales where the ultimate purchase decision is made right then and there without any further consideration or information acquisition? It is far from clear that consumers who are induced by promotional efforts to buy a (type of) product will frequently base their ultimate purchasing decision on the promotional efforts that led to the impulse and purchase the very product they saw displayed without considering any alternatives. Why not quickly gather some information on the product and possible alternatives then and there in-store, e.g. through the use of the smartphone or simply wandering over to the not-so-prominently displayed alternatives? Costs decide whether the consumer will engage in information search or whether he will skip the search for information, moving from the impulse created through the *Klein* service directly to the purchase, learning about the quality post-sale through consuming, experiencing the product. With the low costs of information available through the web, impulse sales are likely to be decreasing; only with regard to very inexpensive goods and the consumer being under time constraints impulse sales appear realistic. For boxed candy Klein's model impulse buy scenario may be reasonable – if the consumer sees a prominently displayed candy bar, he may just grab it in a rush and buy it. Maybe also a cheap non-sense plastic toy that the consumer buys to get his kid to stop screaming when waiting at the cash-out. But it is difficult to think of other products where such an impulse buy without prior intent to buy the product and without further information search appears likely. If the consumer walks through a department store and a pair of prominently displayed

[405] Wright (2014: 13) finds that the provision of premium shelf space does not have significant inter-retailer demand effects.

shoes catches his eyes – would the consumer really just snatch this particular pair of shoes? Wouldn't he at least walk the few steps necessary to be able to reach the shelf where other shoes are stocked and have a look? And when a prominently displayed backpack makes the consumer to want a backpack – wouldn't he engage in a short internet search over his smartphone getting some more information about this backpack comparing it to similar ones? As soon as the product for which the impulse is created is more costly than a boxed candy or has some (easily comparable) functional features the scenario appears to be unlikely.

In addition, positioning is found to be the service relevant for impulse buys. But, as already argued above in the analysis of the prevailing view's examination of the 'apparent likelihood',[406] the positioning of a product is not a difficult-to-specify service, and can be contracted for directly so that RPM is not the most efficient mechanism. Again it must be stressed, it is not argued that suppliers do not know that RPM is not the most efficient mechanism to get the sought-for service, here positioning, and are mistaken in their desire to use RPM; rather it is argued that it is likely that the supplier does not use RPM to get the dealer to position the product, he uses RPM to increase sales in a different way, but not through inducing point-of-sale services.

So while it is true that the promotional service that leads to the impulse lack inter-retailer demand effects, it is unlikely that for a lot products such impulse creation can actually generate sales.

4. The 'apparent likelihood' of the second scenario

Regarding the second scenario, i.e. where the consumer has the intent to purchase a type of product, but has not decided on the brand yet, it can also be doubted that in view of the shift in consumer behavior due to the emergence of the web-enabled technologies (described above) the salesperson has a lot of influence on the consumer's decision left.[407]

Influence at the physical point-of-sale is particularly unlikely in the Klein model scenario as under the model the services, for which RPM is supposedly needed, must lack inter-retailer

[406] See above chapter 2 III.B.2(b) and 3.
[407] See e.g. Kucuk and Krishnamurthy (2011: 54) ("In the purchase stage, the influence of the salesperson diminishes as the consumer initiates the purchase and the seller is replaced by a consumer-directed, unobtrusive, informational process.").

demand effects. The requirement of lacking inter-retailer demand effects means that the consumer under the Klein model did not choose the store based on her expectation to find the RPM-induced promotional efforts that ultimately became decisive for her decision there. In the world of social networks and (fashion) bloggers and instagrammers, the most important influencers are likely to be found online, not in an individual store, in particular if the consumer did not choose that particular store to begin with, based on the advice/influence she expects there. Even if the model is about factors that concern subconscious appeal, the consumer will be aware of who/where this influence comes from and be more receptive when he chose the source deliberately. Take for example *Klein's* example of the unspecifiable fashion advice in a department store. It does not fit the model, because either influence will be unlikely to be successful (and the service not crucial for sales) or, where the consumer is receptive to influence at the point-of-sale, the service will have inter-retailer demand effects. If a consumer visits a department store like Nordstrom, because she knows there will be helpful sales personnel which helps or with the decision which piecing of clothing to buy, then this is about services that can draw in consumers, i.e. that do not lack inter-retailer demand effects and thus the model does not apply. If the consumer has not deliberately chosen that particular store, she will not be receptive for subconscious appeal factors. Either influence is likely at the point-of-sale, but then also inter-retailer demand effects are likely and the Klein model not applicable for this reason; or there are no inter-retailer demand effects, but then also influence is unlikely and the Klein model again is unlikely to apply. *Klein* himself, when defending his model against *Grimes*' critique, points out the inter-retailer demand effects, seemingly unaware that then the model is not applicable[408]. In short, it is difficult to imagine what services could be meant that are both crucial for sales but do not draw consumers in.

5. The case of branded goods

In addition, the model's conditions are in conflict with each other, if it is considered what the business literature tells us about brands. The apparent likelihood of a scenario, in which the

[408] Klein (2009: 478-479) basically argues that, because of the inter-retailer demand effects, the services induced by RPM in his model cannot be misleading or biased, as *Grimes* suggests. Specifically Klein argues that "[c]onsumers choose the places and the services they expect to receive, including whether the retailer employs a knowledgeable sale staff that provides reliable information. The retailing sector of the economy is highly competitive, with retailers competing intensively with one another to develop favorable reputations among consumers with regard to these and other dimensions. In this competitive retail marketplace it is unlikely that retailers will survive if they consistently sell inferior products at relatively high prices because they are able to convince consumers on the basis of biased and misleading information."
For the debate between *Klein* and *Grimes* see below section II.D.6 and chapter 4 III.B.2(b).

desired dealer services are not provided due to an incentive compatibility (considered to be the case for branded goods), while at the same time being so difficult-to-specify that they cannot be directly contracted for (thus making RPM an efficient contract enforcement mechanism) is very low. RPM is about giving up control over promotional efforts, branding on the other hand is about controlling the vertical chain.

The prevailing view finds the Klein model applicable primarily to branded goods for which image-related promotional services play a crucial role.[409] What is not considered though, and this makes it very unlikely that RPM is used to induce promotional efforts for branded goods at the dealer, is that at the same time, for the model to apply, it can only be about services that are unspecifiable and thus better left into the hands of dealers.[410] *Klein* himself notes that RPM is about giving up control, when he argues that RPM is used where it is efficient for the supplier "to leave it up to the retailer to determine the details of how this should be accomplished" pointing to the majority opinion in Leegin which has picked up the same argument.[411] Also in the *Economists' Leegin Brief* it is argued that RPM is efficient where "the retailer, rather than the manufacturer, knows which retailer-level services will be most effective in maximizing the competitiveness of the product, or [where] the most effective services will be discovered only through experience with the market and will be more apparent to the retailer than to the manufacturer"[412]. That RPM is about giving up control over the promotional efforts of the dealer is widely acknowledged; branding on the other hand is primarily about controlling the vertical chain.

That a brand manufacturer should want to leave the specification of image-related services to the individual dealer or that the image is build-up on what only the individual retailer can know about consumers is not realistic. Branded good manufacturers aim to control the marketing of the brand in all its aspects in order to protect the image component of the product, which works best/only if the image is uniform. The importance of control within the vertical chain is the very reason why brand manufacturers are vehemently lobbying for a more lenient approach with regard to the prohibition of vertical restraints in general including RPM.[413] Restrictions of

[409] See e.g. Klein and Murphy (1988: 291). On the claim that the model is primarily applicable to branded goods see above chapter 2 III.A.2 (b).
[410] On the condition that RPM is efficient only in case of unspecifiable services see below III.
[411] Klein (2009: 449) citing *Leegin Creative Leather Products v. PSKS*, 551 U.S. 877, 892 (2007).
[412] Economists *Leegin* Brief (2007: 9).
[413] See e.g. Ahlert and Schefer (2013: 75) reporting on their lobbying efforts.
Also see the numerous publications sponsored by brand manufacturers directly or their lobby organisations, for example Buettner *et al*. (2009); Beil *et al*. (2014); Coscelli *et al*. (2008).

intrabrand are necessary in order to compete based on image, is what we hear from the management literature that supports the efforts of brand manufacturers.[414] The striving for control over the image-component of a branded product is also reflected in the extension of the legal protection of trademarks through anti-dilution measures, which were the result of concerted lobbying efforts by branded goods manufacturers.[415]

If we look at what this management literature tells us, it becomes clear that it cannot be image-related services that brand manufacturers want to induce through RPM. RPM is an efficient mechanism only for services that are not specifiable and better left in the control of the individual dealer; image on the other hand needs to be strictly controlled by the supplier. More plausible than the assumption that the supplier pays the retailer for unspecifiable image-related services is that the "service" it seeks to obtain from the dealer is the control over the retail price in order to keep up a uniform high price level.[416]

6. Conclusion / Difference to Grimes' argument

Using the 'apparent likelihood'/reasonableness standard that also the prevailing view accepts and uses as evidence, i.e. as a method to confirm economic models with the real world phenomenon they describe, it can be said that it is unlikely that RPM can frequently be explained by the Klein model. It is unlikely that there are pre-sale services, which satisfy all requirements of the model. This becomes clear in particular if the argument made in the next section is added, in which it is argued that RPM is unlikely to be an efficient mechanism for the inducement of services.[417]

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[414] See e.g. Ahlert and Schefer (2013: 56) arguing that "[b]ringing attractive supply concepts to the consumer level effectively and efficiently via vertical marketing **requires strict, consistent control of processes** in the value systems by the participants themselves" (emphasis added).
There is a whole strand of management literature in Germany, calling itself the "Münsteraner Argumentationslinie", which focuses on justifying from a management perspective why it is so important for brand manufacturers to control the vertical distribution/value chain.
See in particular their "economic manifest", Ahlert et al. (2012; 2012a); in English: Ahlert (2012); Ahlert and Schefer (2013).
[415] Ramello and Silva (2006: 949); McCarthy (2004: 1163).
For an overview of the protection of dilution in trademark law in the EU and US see for example McCarthy (2004).
[416] A similar argument is made by Grimes (2015: 139), who argues that "[i]f the marketing of brand is part of its overall image, it makes sense that producers would seek control over retail marketing".
Also the Commission assumes that "a brand image [is created] by imposing a certain measure of uniformity and quality standardization on the distributors" (Commission, Vertical Guidelines 2010, para. 107(i).
[417] Below III.

Also *Grimes* has pointed to the loss of control over promotional efforts that results for the supplier from using RPM[418] and has built an argument on it that RPM is not welfare-enhancing. His argument differs from the argument made here though and it has been refuted by *Klein.*[419]

While above the loss of control over promotion is used to argue that the model appears to be unlikely to be consistent with the real world phenomenon of RPM, *Grimes* agrees with *Klein* with respect to the apparent likelihood of the model and considers the model to be broadly applicable, i.e. finds that RPM is often used to induce dealer promotion.[420] His disagreement with *Klein* concerns only the effects predicted in the model. *Grimes* argues that, when the promotional efforts are left to the discretion of the dealer, dealers are induced to promote a specific brand, independent from the merits of the product, through misleading, deceptive or at least non-informational advertising, which is "beyond the control and perhaps even the knowledge of the producer"[421]. *Grimes* posits that such misleading or non-informational promotional efforts cannot be considered pro-competitive, that an increase in sales that is based on such "skewed buying choices" cannot be considered an increase in welfare.[422] *Klein* has refuted *Grimes'* position in two respects. First *Klein* argues that it is unlikely that dealers can be induced to mislead consumers.[423] Second he argues that, even if it were likely, *Grimes*' conclusion that RPM then is anti-competitive, even though sales are increased, is not justified.[424] *Klein's* first argument, namely that dealers' in a competitive retail market would not be willing to risk their reputation, is a convincing argument, if looked at from the

[418] Grimes (2010: 113) emphasizing that "[w]hen a manufacturer imposes RPM, it is creating an incentive for dealer promotion of the brand, but it is to a considerable extent ceding control of the promotion to the dealer".
[419] See for the debate that ensued between Klein and Grimes after *Leegin* Grimes (2008); Klein (2009), Grimes (2010).
[420] Grimes (2008: 188). Similar Grimes (2010: 104) finding the model's assumptions to be "intuitive, surely self-evident, to those in manufacturing and retailing"; also id. at 107 considering the model's requirement of an incentive incompatibility to be comprehensive and id. at 147
[421] Grimes (2010: 104-105). With regard to non-information promotion Grimes (2010: 108). For the link between seizing control to dealers and misleading promotion e.g. Grimes (2009:8) (arguing that "[misleading promotion] occurs because RPM moves the promotion from the manufacturer or brand seller to the retailer, where promotion excesses are more difficult to monitor and control").
Grimes has been building this theory of RPM to induce misleading dealer promotion since Grimes (1992a).
[422] See already Grimes (1992: 824).
[423] Klein (2009: 478-479) basically argues that, because of the inter-retailer demand effects, the services induced by RPM in his model cannot be misleading or biased, as *Grimes* suggests. Specifically Klein argues that "[c]onsumers choose the places and the services they expect to receive, including whether the retailer employs a knowledgeable sale staff that provides reliable information. The retailing sector of the economy is highly competitive, with retailers competing intensively with one another to develop favorable reputations among consumers with regard to these and other dimensions. In this competitive retail marketplace it is unlikely that retailers will survive if they consistently sell inferior products at relatively high prices because they are able to convince consumers on the basis of biased and misleading information."
[424] For the first argument see Klein (2009: 478-9), the second id. (2009: 480).

perspective of an apparent likelihood standard.[425] That there are no (more quantitative) empirical studies on the link between RPM and misleading promotion, something *Klein* and *Grimes* fight over, is not crucial.[426] Misleading advertising by dealers (caused by the loss of control of the supplier), too much discretion for dealers and wrong incentives, as *Grimes* suggests, are not the issue. Contrary to what *Grimes* posits, RPM does not lead to deceptive dealer promotion, because, as argued in this chapter, it is not likely that RPM is used to induce dealer services. Still, the wider point *Grimes* makes in his critique on the Klein model is an important one, as *Grimes* questions whether in the case of the Klein model the output/profitability test is an accurate measure for consumer welfare.[427] We will come back to this issue in chapter 4, but in contrast to *Grimes*, who takes issue with the prediction of positive welfare effects in the Klein model, because the supplier's increase in sales is caused by skewing consumer decisions through misleading dealer promotion, the output/profitability test is questioned in a different context, not that of misleading dealer services. Chapter 4 argues that RPM is used not to induce dealer services, but to create an artificially high price that is used either as a quality signal (price model 1) or becomes part of the product's allure (price model 2) or is used to bias consumer decisions (price model 3).[428] Similar to *Grimes* the output/profitability test is questioned, when the RPM-induced price is not needed to remedy a market failure (as in the 'price as quality' signal model), but can nevertheless increase sales supposedly because it has become a product component in itself (as in the 'price as utility' model) – RPM in these instances may be able to increase sales merely because it is able to anchor the consumer in her decision creating a false signal of high quality that is not corrected by the consumer (as in the 'consumer bias' model). The question raised by *Grimes* that there may be instances where increased sales are not an accurate measure for consumer welfare is the crucial issue that needs to be discussed, in particular against the background of recently emerging cognitive psychological research; but the issue should not be discussed in the context

[425] Klein (2009: 478-9) points here to the inter-retailer demand effects when he argues that "[c]onsumers choose the places and the services they expect to receive, including whether the retailer employs a knowledgeable sale staff that provides reliable information. The retailing sector of the economy is highly competitive, with retailers competing intensively with one another to develop favorable reputations among consumers with regard to these and other dimensions. In this competitive retail marketplace it is unlikely that retailers will survive if they consistently sell inferior products at relatively high prices because they are able to convince consumers on the basis of biased and misleading information."

[426] Klein (2009: 478) criticizes *Grimes'* claim because „he refers to no economic study to support his claim that, when [RPM] is used to compensate retailers for increased promotion, it leads retailers to supply misleading information." Grimes replies by pointing to the difficulty of compiling evidence of misleading mostly oral representations (Grimes 2010: 131).

[427] Grimes (2010: 147) argues that the Klein model "focuses the RPM debate on what is perhaps the most salient question that separates theorists who would tolerate from theorists who would condemn RPM: whether an increase in manufacturer's output or profitability should be the primary measure of RPM's competitive effect".

[428] See below chapter 4 III.B.2.

of the Klein model, because the assumption that RPM is about dealer services is wrong and a focus on the Klein model thus would not enable a constructive discussion; rather, the issue needs to be addressed in the context of how RPM is used to create an artificial price, which (when not used to remedy an informational market failure) may influence consumer decisions in a way not reconcilable with a prediction of positive welfare effects.[429]

E. Conclusion on the reasonableness of the service-related conditions

The analysis of the 'apparent likelihood' of the prevailing view's service-based models suggests that the models' conditions will rarely be satisfied in real world markets, in particular if it is considered that all conditions of a model must be satisfied.

Consumer demand rarely crucially depends on the provision of the type of pre-sale services that would be able to satisfy also the other conditions of the positive models. It appears to be an uncommon occurrence in today's markets that sales crucially depend on services, which are free-rideable or lack inter-retailer demand effects and which at the same time must be provided for by the dealer at the physical store and are unspecifiable so that more direct contracting forms, which are less costly for the supplier, are not available.

The argument that the service-related conditions of the positive models are unlikely to be fulfilled in the real world is strengthened when it is considered, and this is argued below in section III, that RPM is not an efficient mechanism to induce such pre-sale services.

III. 'Apparent likelihood' of the efficient-mechanism condition

Before coming to a final conclusion on the apparent likelihood of the conditions of the positive models, one more argument is added, which supports the claim built up in section II.

This section looks at the 'apparent likelihood' of the condition that under all RPM models RPM must be an efficient mechanism to get the dealer to provide the sought-for pre-sale services. It argues that the condition of the positive service-based models that RPM is an efficient

[429] On the issue of the output/profitability test in the context of the 'price as utility' model see below chapter 4 III.B.2 and chapter 5 III.B.

mechanism to induce the desired services, is unlikely to be the case in real world markets. This points into the same direction as the argument made in the previous sections and thus strengthens the above claim: It is not plausible that what the supplier desires is the inducement of pre-sales services; if the supplier were seeking such services, he would be paying for the services directly; that the supplier nevertheless prefers RPM can only be explained by him desiring not services, but the one thing other payment mechanisms cannot buy him: an artificially created uniform price level.

As in section II above, the argument is again built by using the apparent likelihood standard, the use of which has been justified above.[430] As the 'efficient mechanism' condition concerns both free riding models and the contract enforcement model (= Klein model) there is no separate analysis for each of the models necessary.

A. RPM is not self-enforcing

As shown above, one crucial question the positive models must be able to explain is why, if there are services that retailers by themselves have no incentive to provide, the supplier uses RPM to induce those very services[431]. Why go the indirect route over setting minimum prices, guaranteeing dealer margins and thereby indirectly inducing service provision? Why not directly contract for the services?

The quick answer to this question, which is often given, is that the desired services are not contractible because they are difficult to specify and difficult to monitor[432], the assumption being that "it is much easier to enforce a contract against cutting price than a contract against inadequate sales effort or service"[433]. It is argued that because the services induced through RPM are difficult to specify and monitor and cannot be enforced perfectly, direct contracting is impossible making the use of RPM the efficient mechanism[434]. Thus, as mentioned several times above, one condition of each of the models is that the desired services are difficult to specify.

[430] See above section I.B.
[431] See above chapter 2 II.A.2.
[432] See e.g. Brief Economists Leegin (2007: 9); Elzinga and Mills (2008: 1845).
[433] Mathewson and Winter (1998: 74).
[434] See for example Brief Economists Leegin (2007: 9); Elzinga and Mills (2008: 1845).

But, and this is also generally accepted and is the argument we have seen is used by the Commission to defend its view[435], RPM by itself cannot get the dealer to provide the desired services; even when using RPM the dealer must monitor and verify service performance so there really is not much of an advantage over directly contracting the services as monitoring of services will be necessary anyway. This is accepted for both the free rider models but also the Klein model.

In case of the free rider models RPM alone is not self-enforcing, because even under RPM the incentive to free ride on the free-rideable services of the other retailers remains the same, as *Klein* and *Murphy* clarified in their 1988 article, in which they thus considered Telser's model to be "fundamentally flawed"[436]. This argument that even under RPM the dealer can still free ride and has an incentive to do so by supplying nonprice services is widely accepted[437] and has also found its way into the Commission's Guidelines.[438]

Also under the Klein model, RPM alone is not self-enforcing, because also in the case of not free-rideable services the retailer does not have the independent incentive to supply all of the promotional services the manufacturer has purchased and expects to receive, but rather "an economic incentive not to supply all the promotional services paid for by the manufacturer"[439]. *Klein* explains that with RPM, "[a]lthough the increased retail profit margin created by [RPM]

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[435] See for example Grimes (2015: 144); Peeperkorn (2008: 209); Grippini-Fournier (2010: 526). Both the Commission and the Bundeskartellamt rely on this assumption (Commission, Vertical Guidelines 2010, para. 225; Bundeskartellamt in OECD (2008: 144)).

[436] On this see above chapter 2 II.A.1.(b).
Klein and Murphy (1988: 266) ("Vertical restraints, by themselves, do not create a direct incentive for retailers to supply desired services. …. Even if the manufacturer fixes the retail price and does not permit price competition, retailers still have an incentive to free ride … ."), see also id. (1988: 285).
As Grippini-Fournier (2010: 526) explains "[s]ince –by hypothesis- a dealer may free ride on other dealers' services, the rational, profit-maximizing dealer has every incentive not to incur the cost of the extra services. Instead, it can take advantage of the expanded demand brought about by other dealers' efforts." It goes too far though to conclude from this, as Grippini-Fournier (2010:526) does, that "if RPM does not succeed in generating the type of services subject to free riding, the point of using RPM cannot be to prevent free riding on these services." The assumption of the models is that RPM combined with monitoring prices and performance is less costly, as RPM makes less monitoring necessary as the threat of termination comes with a high value.

[437] Klein and Murphy (1988: 266) give the following example: "… free-riding retailers of personal computers could encourage consumers to obtain a product demonstration from a full-service retailer before purchasing the product from them with, say, lower priced tied accessories."
Paldor (2007: 150-153) terms this the "nonprice competition caveat' and identifies as one of the shortcomings of the positive RPM models.
See also already Gerhart (1981: 431-2).

[438] Commission, Vertical Guidelines 2010, para. 225.

[439] Klein (2009: 458-459). "It is important to emphasize that this incentive of a retailer not to supply all the promotional services it has been paid to supply is present even when the retailer is not free riding on the promotional services supplied by other retailers. That is why, in addition to monitoring minimum retail prices and preventing free riding, the manufacturer also must monitor retailer performance and terminate those retailers who are not supplying all the manufacturer-specific promotional efforts they have been compensated to provide."

provides the retailer with an increased independent incentive to supply promotional services, on the margin the retailer does not have the independent incentive to supply all of the promotional services the manufacturer has purchased and expects to receive"[440]. *Klein* posits that this is so because "[RPM] provides compensation to retailers for increased promotional efforts in the form of a payment based on all of a retailer's sales, not solely a retailer's incremental sales"; this means that "when a retailer reduces its promotional effort and its sales decrease, it still receives additional compensation on its remaining sales". "Because of this key economic difference between the form of retailer compensation for promotional effort that is based on total retailer sales and the effect of retailer promotional effort that solely influences incremental retailer sales, the cost to the retailer on the margin of supplying additional promotional effort will be greater than its profit on promotion-induced incremental sales. Therefore, the retailer has an economic incentive not to supply all the promotional services paid for by the manufacturer."[441]

This means that, if RPM is used to induce the sought-for services, monitoring of service performance is necessary in addition to monitoring of prices. Thus, even where services are difficult to specify and monitor, it is not so apparent why the supplier would chose RPM over (less costly) direct payment mechanisms. It is thus necessary to take a closer look at the cost of the different mechanisms for the supplier to see what is reasonable to assume.

Until here this conforms to the argument used also by the Commission and other defenders of the EU's strict stance. But what has not been considered in the debate on the EU's strict stance is that the 'economic consensus' argument goes further here, and this is the part that has not been refuted so far and that can be examined by using the apparent likelihood standard again.

B. The costs of RPM

The prevailing view assumes that RPM is the most efficient mechanism for the supplier to get the sought-for services, even though monitoring of service performance will still be necessary and even though in addition also prices must be monitored. This is what has been overlooked so far in the current debate on the EU's strict approach and has not been addressed by the Commission for example.

[440] Klein (2009: 459).
[441] Klein (2009: 459).

The explanation given by *Klein* for why RPM, even though not self-enforcing, is efficient is about monitoring costs[442]. He argues that, compared to other more direct forms of payment, RPM lowers the costs of monitoring service performance. RPM as a compensation on the basis of sales is found to create retailer incentives to perform that are more closely aligned with the manufacturer's desired retailer performance, in particular as the increased rent stream, which is protected against erosion by retail price competition, ensures that contract termination in case of inadequate performance of the desired service has sufficient value as a threat[443]. RPM thus lowers the manufacturer's costs of monitoring retailer performance and makes it cheaper for the manufacturer to assure retailer performance than in the case of direct payments.[444] In short, *Klein's* argument is that the dealers are given supra-normal profits so that the threat of termination in the case of noncompliance is meaningful[445]. This is considered to make the monitoring costs lower than in case of alternative mechanisms such as promotional allowances.

Others have argued though that for example promotional allowances would be a less costly alternative and questioned the empirical relevance of *Klein's* argument[446]. There are no empirical findings on the monitoring and enforcement costs of dealer performance under RPM versus those under more direct compensation forms such as promotional allowances[447]. But the issue can approached by using the same 'apparent likelihood' standard that has been used throughout this chapter. Though the arguments below can be found in the RPM-critical

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[442] Compare Steiner (1991: 389) noting that "both Klein and Murphy and Ippolito see promotional allowance programs as being inherently saddled with high monitoring costs", but also pointing out that "Klein and Murphy stress an additional legal pitfall, the supposed inability of manufacturers to write explicit, legally enforceable contracts for retailer promotional services due to the impossibility of assigning an accurate monetary value to them."

[443] Mathewson and Winter (1998:74).

[444] Klein (2009: 35).
Similar already Bork (1978: 290-291) who argues that "[RPM] is preferable to direct payment for such effort" reasoning that "[d]irect payments may be accepted and competed away in lower prices, again destroying the incentive of other outlets to provide the desired efforts. The manufacturer would have to engage in extensive policing activities to catch such actions, and would to argue the question of whether the efforts being made were the correct amount. [RPM], however will be policed for the manufacturer in large measure by other outlets, which will quickly feel and report any price cutting … . When the restraints are complied with, arguments about the amount of effort being made are minimized, since each outlet has the same incentive as the manufacturer to provide such efforts at the proper level."

[445] Brunell (2007:506).

[446] Grimes (2010: 114-5; 2008: 477-8); Paldor (2007: 205). See already Steiner (1991: 397), id. (1991a: 198).
Critical on the assumption that RPM as compensation could be frequently the most effective mechanism is Brunell (2007: 506) noting that "… it is not obvious that this theory has any empirical significance" and asking "how many manufacturers in the real world look to provide supranormal profits to their distributors so that the threat of termination in the case of noncompliance is meaningful?"

[447] Compare Steiner 1991 (389) ("A strange property of the entire vertical restraints literature is the absence of empirical investigations of the role of manufacturers' promotional allowances. Neither economists nor legal scholars seem to have tried to measure the real-world monitoring and policing costs of promotional allowance programs.").

literature already, in particular in the work of *Grimes*, they have not been compiled at one place yet.

Grimes points to three reasons why direct payments appear to be less costly, though he has never added up the three at one place together.

First. What speaks for lower costs of more direct forms of reimbursement is that only dealers that perform the services are paid, in particular only on proof of service provision. With RPM in contrast usually all dealers are paid through the higher margin, but often, as seen for example in the case of *PING*[448] and also *Leegin*[449], not all dealers provide the supposedly desired services. This makes RPM a very costly instrument for the manufacturer, should it really be intended to incentivize services[450]. Why pay all dealers through RPM, if not all dealers actually provide the service? Why not only pay the dealers that actually provide the services through promotional allowances?

The second argument *Grimes* makes is that inducing services through RPM requires both, monitoring of retail prices and monitoring of service performance. Monitoring of prices also comes at a cost, which is not incurred if services are directly contracted for.[451]

A third argument can be added, which *Grimes* has also mentioned though only in passing. Whether RPM is the more efficient mechanism to induce the desired services (should there be any that need incentivizing), is not merely an exercise in comparing monitoring costs. Using RPM as service inducement mechanism has compared to other methods the additional cost (for the supplier) that comes from restricting price competition between retailers. As mentioned

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[448] Grimes (2008:502, Fn. 119) reports that, although golf club producer PING asserts that RPM is used to assure the custom evaluations are offered by dealers, PING golf clubs are sold through authorized Internet sellers and other dealers that do not offer these custom evaluations. Similar Grimes (2010: 138).

[449] Bauer (2007:29) points out that "Leegin even misrepresented that its business model was to sell products through small boutiques focused on service when in fact Leegin also sells its products at Nordstrom and on the Internet" and refers for this finding to a footnote in Leegin's expert's report, which was excluded at trial. For the possibility to buy the Brighton brand on the internet see www.brighton.com.

[450] This argument is made by Grimes (2010: 138) with regard to golf club producer Ping: "If such presale consultation is essential for Ping's business model, it could be more efficiently provided, at lower overall cost to the consumer, by paying promotion allowances only to firms that actually provide the consultation. Internet sellers or other firms that do not provide the service would not have to be paid, lowering the overall marketing cost of providing the consultations, and allowing all consumers to purchase at prices determined by intrabrand competition among dealers.

More general Grimes (2010: 104-105) ("The case for the inefficiency of RPM as a promotion tool is compelling. RPM shifts promotion incentives to the dealer, but pays for promotion that may or may not occur.").

[451] Grimes (2010: 112) emphasizing that when using RPM "the producer must monitor both the dealer's performance of the promotion and the dealer's adherence to the minimum resale price" noting that the result are higher costs. Id. (2010: 115) further explains that direct contracting, in particular promotion allowances that make payment contingent upon provision of the services, are less costly because "[t]he manufacturer's monitoring can focus solely on the presale [services], without the need to inquire about the dealer's pricing policies".

above other things being equal, a supplier, "having sold the product to the retailer, [] wants the retailing function to be performed as efficiently as possible, with competing retailer, in turn, passing on to consumers the lowest price consistent with retailers' providing desired services and continuing in business"[452]. With retailers not being able to pass-on cost-savings to consumers, retailers are unlikely to provide the supplier with the most efficient retailing services;[453] and the supplier by using RPM is giving up additional sales as efficient dealers cannot pass-on cost savings. RPM comes thus at a very high cost for suppliers.

Based on these three different costs that come with using RPM it is very likely that it is more costly than more direct mechanisms.

C. Conclusion / Difference to EU argument

RPM is likely to be a very costly mechanism should dealers use it to induce dealers to provide services at the point of sale, in particular in view of the possibility to contract for services directly. If the dealer's main desire was service-provision at the dealer level, it would choose a less costly and more effective mechanism.

1. Extension of the Commission's argument

The thesis confirms here an argument also made by in particular the Commission, but it extends the existing arguments. So far in the EU debate *Klein's* reply to the claim that free-riding does not eliminate the free rider problem, namely that RPM is combined with monitoring services so that service provision is guaranteed, has largely been ignored[454]. *Klein's* reply is picked up

[452] See for example Economists Brief *Leegin* (2007: 5).
Also Coscelli et al. (2008: 4) ("It cannot be emphasized enough that high prices at the retail level, or limitations on the number or types of retailers, are a cost to a supplier – and would be incurred in reality only if there is some offsetting benefit.").
See also above chapter 2 II. on why RPM is such a puzzle.
[453] Similar Grimes (2015: 145) arguing that "RPM as a subsidy device is still a relatively costly way of achieving this goal [of inducing dealer services] since it makes it less likely that natural market forces will allow efficient retailers to pass benefits on to consumers"
Similar Paldor (2007: 205) noting that "it is unclear why the manufacturer would not opt for a solution that does the same [i.e. inducing retailers to provide services through more direct mechanisms] without compromising competition at the retail level".
[454] For example by Grippini-Fournier (2010: 526) who argues that RPM cannot induce free-rideable services, but does not take into account is the addition/clarification of the Telser model by Klein (on this above …).

here and then refuted based on the apparent likelihood standard. *Klein's* claim that RPM is an efficient mechanism even when monitoring is necessary as RPM is not self-enforcing is examined by considering the costs of RPM when also monitoring of services is necessary and it is argued, based on *Grimes*, that it is unlikely that RPM is the most efficient mechanism to induce dealer services.

2. Difference to the EU's argument / The limits of the argument

There is another more important difference to how the argument that RPM is not an efficient mechanism has been used to justify the EU's strict stance.

The argument that RPM is not an efficient mechanism to induce dealer services is similar to what the ECJ argues in *AEG*, where it rejects the possibility that refusing to deal with retailers, which did not adhere to minimum prices, had the object of enhancing service competition between the dealers, because if this was the objective of the agreement (and the motivation of the supplier) the supplier could have made the provision of the desired (high quality, specialist) services the requirement for access to the system.[455] The conclusion, which the ECJ draws for the case, is that thus there is no justification for the reduction of intrabrand competition "as the[] sole effect would be to reduce price competition"[456]. From the finding that minimum prices cannot have the aim of improving service competition (because if it were, the supplier would require the dealer to provide specific services) the ECJ very quickly concludes that the object of the policy must be the restriction of competition, because its sole effect is that it reduces price competition. The ECJ assumes here that, if the motive behind the policy is not service inducement, it must be restricting competition; what is not considered is that the supplier may have an entirely different reason for reducing price competition, which could outweigh the restriction of intrabrand competition inherent in requiring minimum prices. This assumption of the ECJ is problematic in particular because the supplier desiring minimum prices does not directly benefit from it. While it is true that it can be assumed that the elimination of *intra*brand price competition is in general as harmful as the elimination of *inter*brand price competition, there is an important different between the two types of competition in the cases in which the intrabrand competition restriction is vertically-implemented on the initiative of the supplier. In

[455] ECJ 25.10.1983, C-107/82, EU:C:1983:293 – *AEG,* para. 42-3.
[456] ECJ 25.10.1983, C-107/82, EU:C:1983:293 – AEG, para. 34.

case of horizontal agreements that restrict *inter*brand price competition the cartelists directly benefit from the elimination of competition among them. In the case of *intra*brand price competition, where the restriction of the horizontal competition among dealers is vertically implemented on the initiative of the supplier, the supplier does not directly benefit from the restriction of competition, as the elimination of intrabrand price competition comes at a high cost for the supplier. It thus would have to be considered why the supplier would desire a high price policy of its dealers and be willing to incur the costs associated with RPM, before concluding that there can only be negative effects. To merely point to the in general harmful effects of intrabrand price competition, as the ECJ does, is not sufficient, because it is not clear why the supplier would have an interest in the elimination of intrabrand competition, as in the absence of market power it benefits from letting its dealer compete.

Similarly, the Commission justifies its presumption that it is unlikely that RPM has positive effects (which could then lead to an exemption under Art. 101 (3) TFEU) by pointing out that RPM is not an efficient mechanism to induce dealer services and to realize efficiencies.[457] With regard to the free rider models in general the Commission uses the argument we have seen above that RPM (without monitoring) may not lead to the extra promotion as it is not able to eliminate the incentive and possibility to free ride.[458] With regard to the market entry model the Commission points to a lump sum payment or charging the dealer lower prices as alternatives.[459] Though the Commission is correct with these findings and the thesis makes the same argument, i.e. that RPM is not an efficient mechanism to solve free rider problems, the legal implications drawn under EU law are too far-reaching. The Commission seems to assume that the supplier is simply using the wrong means to induce dealer services, thus its reference to less restrictive and more efficient means.[460] Again it is not sufficient to point to the general reduction in intrabrand price competition that results from RPM, which according to the

[457] See the Commission's contribution to OECD (2008: 231).
[458] Commission, Contribution to OECD (2008: 228).
[459] Commission, Contribution to OECD (2008: 229). It is not entirely clear, whether the argument is that these alternatives are less efficient or merely less restrictive and more beneficial for the consumer. As the Commission also directly states that it assumes RPM in general to not be an efficient instrument for bringing about efficiencies (id., 231), the former is assumed.
[460] Compare Marvel's interpretation in OECD (2008: 267) "Professor Marvel equated the position of the EC with the view that the manufacturer doesn't know what he/she is doing and that it is up to competition authorities to step in. The EC claims that if RPM were allowed the retailer will not do anything beneficial but will pocket the money. In effect the EC is saying: ―Manufacturer, you're an idiot. Why did you do that? But the manufacturer keeps coming back for more. If there are no offsetting efficiencies a higher retailer margin leading to higher retail prices reduces final sales for the manufacturer - and yet the manufacturers keep coming back to say: ―Hey, please let me kick myself in the head by raising my prices so I'll sell less and get nothing back for it whatsoever. Maybe the EC is arguing that competition authorities should protect suppliers from their own foolishness? But why are they repeatedly so foolish?"

Commission has the direct effect of a price increase as dealers are prevented from lowering their sales prices and may also hinder new dealers from entering the market with low prices, which may reduce dynamism and innovation on the distribution level.[461] The assumption seems to be that a supplier mistakenly uses RPM and erroneously incurs the costs of RPM, which are at the same time the negative effects of RPM resulting from the elimination of intrabrand competition. In a sense the argument seems to be that the supplier foolishly uses an inefficient mechanism thereby accidentally harming competition. But from a welfare economics perspective it cannot so easily assumed that the supplier is mistakenly using inefficient RPM. There must be some offsetting benefit. That the elimination of intrabrand competition is in general harmful thus needs to be questioned in the cases, in which intrabrand competition is vertically-implemented. This is important in particular as there is no broadly applicable negative model that could step in and provide the supplier's motivation for incurring the costs of eliminating intrabrand competition.[462]

IV. Conclusion: Good-bye service-based RPM models!

At the root of the EU-US divergence in the legal treatment of RPM lies the basic economic assumption that RPM is generally benign, in particular where no market power is involved. The "economic consensus" assumes that in these cases the elimination of price intrabrand competition is outweighed by the enhancement of interbrand competition, because a rational supplier (in the absence of market power) must be assumed to use RPM only to increase efficiency, in particular by optimizing the vertical distribution chain by aligning incentives; this assumption is supported and concretized by the service-based positive RPM models, in which the supplier enhances its position on the interbrand level by inducing dealer services. These models have been the focus of chapter 2 and chapter 3, which challenge this assumption by arguing that it is highly unlikely that RPM is used by a supplier to solve an incentive conflict in order to induce dealer services.

Chapter 2 and chapter 3 argue that it is highly unlikely that RPM is used by a supplier to solve an incentive conflict in order to induce dealer services. This argument is supported in chapter 2

[461] Commission, EU contribution to OECD (2008: 227); id., Vertical Guidelines, para. 224.

[462] Also Grimes (2010: 104) too quickly concludes from a missing service-based justification to an anti-competition motive ("If the manufacturer can more efficiently accomplish procompetitive promotion goals in other reasonable and less anticompetitive ways, the likelihood that anticompetitive gains motivate the manufacturer is greatly increased.").

by finding that there is, contrary to what is often suggested, no convincing evidence that the service-based RPM models frequently apply. Chapter 3 then follows up on this finding providing a complete analysis of the service-based positive models by using an apparent likelihood standard and combining it with the use of recent findings of the marketing literature on consumer behavior in the information environment of the internet, which is too new to have been systematically considered in the abstract economic models.

Implications for the EU debate on RPM

In particular the following contributions to the EU debate on RPM are made.

1.

It is attempted to set an end to the discussions on the applicability of the free rider models by showing that there is no evidence that they frequently apply and by providing a complete and systematic analysis of the apparent likelihood of the free rider models, which has been missing so far.

In terms of concrete legal implications that should be drawn from the systematic findings on the free rider models in chapter 2 and 3, it is concluded that the service-based free rider models should not be accepted as pro-competitive justifications under Art. 101 (3) TFEU. In particular, it should be made clear in the Commission's Vertical Guidelines that RPM cannot be justified by arguing that it is used to solve a free rider problem and to induce services, because service provision is unlikely to be the motivation for RPM.

2.

With regard to the Klein/contract enforcement model the chapters provide some important clarifications. In chapter 2 it is shown that in the 'economic consensus' the Klein model is considered the most important explanation of RPM; this is something that has so far been overlooked in the EU debate, in which the Klein model is rarely, if ever, addressed. With regard to the apparent likelihood of the model the same argument is made as with regard to the free rider models, namely that due to its focus on pre-sale services the model rarely applies.

In terms of legal implications this means that the Klein model should not be accepted as justification under Art. 101 (3) TFEU. In particular, the Commission should make clear in its

Vertical Guidelines that any type of justification, which claims that RPM is used to induce *services* is not accepted, as it is unlikely that RPM is used to induce services.

The systematic analysis of the Klein model also leads us to an important issue that has been made in this context by *Grimes*: the reliability of the output/profitability test for the prediction of welfare effects in cases, in which the subconscious appeal of the product is raised through the elimination of intrabrand competition.[463] In chapter 4 we will get back to this issue, which appears to be a key issue for the assessment of RPM, though it will be put into the more plausible context of the price-based RPM models.

3.

The systematic analysis of the apparent likelihood of the positive models' conditions has led to another important insight. While it in general supports the EU's reluctance to accept the positive explanations of RPM, it cautions not to draw too far-reaching conclusions for the likelihood of positive versus negative effects and ultimately the legal assessment of RPM.[464] That RPM cannot be explained as an efficient mechanism to induce dealer services does not necessarily mean that the supplier's motivation is an anti-competitive one. The analysis so far merely shows that the main flaw of the prevailing view's position is its reliance on models that are based on the assumption that RPM is used to induce pre-sale services. The positive models the prevailing view relies on cannot confirm *Bork's* broader, more general premise that RPM is most often used to increase sales through enhancing distributive efficiency and fail to provide a concrete explanation as to how the supplier can frequently increase sales through RPM. As seen above, to determine the motivation of the supplier is crucial in order to explain the use of RPM, as – in contrast to the restriction of interbrand competition through a horizontal agreement among competitors – the restriction of intrabrand competition needs to be more closely considered as the supplier, who vertically implements the horizontal restriction of competition among its dealers, does – in contrast to cartelists – not directly benefit from it so that there may be an offsetting benefit that could also enhance competition.

As a consequence one cannot conclude from the finding alone that the service-based models are not plausible that RPM is generally detrimental in terms of welfare; put differently, the presumption of negative effects of RPM cannot be based alone on the showing that the positive service-based models do not apply. Rather the motivation of the supplier to incur the costs of

[463] See above II.D.6.
[464] See above III.C.2.

RPM needs to be further investigated before more far-reaching legal implications can be drawn. In particular it needs to be considered whether there are alternative concrete models that could step in and possibly support the economic consensus' claim that interbrand competition is enhanced when a supplier uses RPM.

Moving on – the quest for an alternative motivation of the supplier

As just concluded it is crucial to figure out the supplier's motivation for eliminating price competition among its dealers, as it is otherwise difficult to argue that negative effects of RPM can be presumed. Also it is not sufficient to refute a theory, here that RPM is frequently based on the service-based models; rather, as *Stigler* pointed out in his Nobel lecture and as *Wright* likes to cite: "It takes a theory to beat a theory" and it needs to be found out what then is the motivation of the supplier when it eliminates intrabrand competition.[465]

Chapter 4 thus attempts to provide such a plausible alternative choosing to focus on three price-based models that appear to be close substitutes to the rejected service-based models.

While others have argued and further investigated the claim (which is similar to what the Commission seems to suggest) that manufacturers use RPM in an inefficient manner (and need to be protected from their own foolishness, which is how the strict stance against RPM has sometimes been understood[466]), the thesis chooses not to go into this direction, as it appears to be difficult to find indications for why suppliers in this situation would not act rational.[467] Nevertheless, for example *Steiner* argues that manufacturer mistakenly employ RPM that is not profit-maximizing, or, more specifically, retain an initially efficient RPM scheme "past the time

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[465] Stigler (1992: 62) as cited by Wright (2009: 359).

[466] Compare OECD (2008: 267) "Professor Marvel equated the position of the EC with the view that the manufacturer doesn't know what he/she is doing and that it is up to competition authorities to step in. The EC claims that if RPM were allowed the retailer will not do anything beneficial but will pocket the money. In effect the EC is saying: ―Manufacturer, you're an idiot. Why did you do that? But the manufacturer keeps coming back for more. If there are no offsetting efficiencies a higher retailer margin leading to higher retail prices reduces final sales for the manufacturer - and yet the manufacturers keep coming back to say: ―Hey, please let me kick myself in the head by raising my prices so I'll sell less and get nothing back for it whatsoever. Maybe the EC is arguing that competition authorities should protect suppliers from their own foolishness? But why are they repeatedly so foolish?"

[467] Cf. the critique by Wright and Stone (2012), who reject behavioral economics as a whole for lack of robustness and empirical support, but have criticized the behavioralist approach to RPM in particular by pointing out that even if behavioral economics was robust and empirically supported, behavioralists still "fail to provide a rigorous and coherent basis for systematically predicting which firms suffer from behavioral biases and which do not" (id., at 1526). The behavioral approach to RPM "fails to consider both incumbents and potential entrants", as it focuses on the implications of irrationality only on incumbent firms, "while ignoring or assuming away the broader implications of applying an identical cognitive bias to others", in particular to new entrants, so their argument (id, at 1535). The behavioral approach to RPM cannot explain, why it assumes only incumbents to be irrational wanting to use inefficient RPM, while new entrants will not suffer from these biases.
On the use of behavioral economics in antitrust see below chapter 4 IV.C.1.

that [it] seemed to serve the firm's profit maximizing purpose" due to "marketing inertia"[468]. Similarly, *Tor* and *Rinner* argue that real-world, boundedly rational manufacturers often erroneously adopt (inefficient) RPM;[469] correspondingly they argue that the dealer cartel model may be more frequently applicable than the rational model make us believe, as boundedly rational manufacturers, who tend to overuse RPM, are less likely to refuse the dealers' request for RPM.[470]

[468] Steiner (1982: 12). *Steiner's* assumption is that the most efficient distribution method changes throughout a product's life cycle, that RPM may be profit-maximizing distribution method at an early stage of the product's life cycle, but that this may change at a later stage (on this see Overstreet (1983: 25). According to *Steiner* manufacturers stick with the initially employed RPM because of "underestimating the elasticity of consumer demand, ignorance, extensive risk aversion and satisficing behavior", all of which can be subsumed under the term "marketing inertia" (Steiner (1982:12)).

[469] Tor and Rinner (2011: 864) ("[RPM] is often the product of systematic error on the part of real-world, boundedly rational manufacturer").

Against the behavioralist argument by Tor and Rinner see Wright and Stone (2012). They reject behavioral economics as a whole for lack of robustness and empirical support, but have criticized the behavioralist approach to RPM in particular by pointing out that even if behavioral economics was robust and empirically supported, behavioralists still "fail to provide a rigorous and coherent basis for systematically predicting which firms suffer from behavioral biases and which do not" (id., at 1526). The behavioral approach to RPM "fails to consider both incumbents and potential entrants", as it focuses on the implications of irrationality only on incumbent firms, "while ignoring or assuming away the broader implications of applying an identical cognitive bias to others", in particular to new entrants, so their argument (id, at 1535). The behavioral approach to RPM cannot explain, why it assumes only incumbents to be irrational wanting to use inefficient RPM, while new entrants will not suffer from these biases.

On the use of behavioral economics in antitrust see below chapter 4 IV.C.1.

[470] Tor and Rinner (2011).

Chapter 4: The price-based models of RPM – the perspective of (welfare) economics

I. Introduction

In the previous two chapters an argument has been built that it is not plausible to assume that – in particular in today's markets – RPM is used to induce service provision at the dealer level. The positive RPM models, on which the 'economic consensus' relies to fill in the more broader claim made by *Bork,* are unlikely to be consistent with the real world use of RPM; there is no "overwhelming" evidence that shows that RPM is used to induce demand-increasing dealer services (chapter 2), rather a systematic analysis of the positive models' conditions based on the 'apparent likelihood' standard shows that – to the contrary – there is evidence that RPM is very unlikely to be used to induce pre-sale services (chapter 3). Chapter 4 now looks at alternatives that could explain the use of RPM in the cases, in which it is unlikely that RPM is used to induce services, taking up the scientific challenge that "it takes a theory to beat a theory"[471] and choosing as a starting point the already existing, but in the RPM debate neglected price-based theories. These models could explain the RPM cases, in the area where the EU approach conflicts with the economic consensus as seen in chapter 1, namely where RPM is initiated by a supplier in the absence of (horizontal) market power.[472] In these models the supplier is not merely indirectly interested in the price, namely as a means to pay for services, but it is the price itself the supplier is interested in, which directly influences, in this case even increases, demand.

The chapter looks at three explanations of RPM, in which RPM is desired not to induce services, but to secure a uniform high price level that functions as quality signal (price model 1), as utility and component of the product (price model 2) or as a mechanism to bias consumer decisions (price model 3). Similar to the service-based models above the models must be able to explain 1. why a supplier facing a down-ward sloping demand curve would want to use RPM,[473] and 2. why, if the RPM-induced price-level leads to an increase in sales, retailers do not provide the desired price-level by themselves. While the service-based models also must (and as we have

[471] Stigler (1992: 62) as cited by Wright (2009: 359).
[472] See above chapter 1 II.C.
[473] Other things being equal, for the manufacturer a higher price equals a lower quantity being sold, a lower retail price a higher quantity being sold; thus, once he has set the wholesale price, the lower the retail price, the higher his profit will be. So why would he want to prevent retailers from competing on and lowering retail prices?

seen struggle to) explain why RPM would be the most efficient mechanism to (indirectly) pay for services through an increased margin, the price-based models do not face this hurdle, which is why they are the more plausible explanation in the first place. All three models explain the situation in which RPM is used by a branded good manufacturer to create the perception of high quality, which leads to either a credible quality signal (price model 1), becomes a component of the product (price model 2) or is used to bias the consumer decision (price model 3).[474]

Price model 1, the price as quality signal model, is a fully-developed welfare economics model. Some difficulties, in particular with regard to the prediction of welfare effects, arise in price model 2, the price as utility or image model. At first sight price model 2 neatly fits into the welfare economics logic, under which an increase in sales is equated with an increase in welfare; but as the increase in sales is reached in the model through the emotional or image component of the product the prediction of welfare effects is not as clear when a closer look is taken. Price model 3 then leaves behind the safe terrain of mainstream welfare economics and takes into account consumer preference formation, as consumers under the model are not rational.

The main reason for why this focus is chosen is that the price-based models, which are introduced in this chapter, are very closely related to the service-based models, which for so long have been considered the primary explanation for the use of RPM. The shift from service- to price-based models is illustrated in table 1 below.[475] We will get back throughout this chapter to how the price-based models are related to the service-based models that have been discussed in chapter 2 and 3;[476] here it only needs to be noted that it is a very small shift, in particular from the quality certification model to the price as quality signal model and from the Klein model to the price as utility model.

The models thus neatly fit into *Bork's* more general claim including the claim that the main negative models will apply only in exceptional cases. Not to focus on for example the newer negative models, which have certainly also not gained enough attention just yet, can be considered a consequence of the insights gained in the previous two chapters. The argument is that though the debate of RPM wrongly focuses on dealer service models, it is not too far off from what the true issue with regard of the assessment of RPM is. RPM is used as a marketing

[474] Overview over the price-models in their relationship to the service-based can be found in table 1 below (section III.B.2.).
[475] See below section III.B.2.
[476] Cf. in particular table 1 below (section III.B.2.).

device that influences consumer decisions, but it does so not through inducing dealers to provide promotional efforts, but rather though the price itself, which creates the perception of high quality, which is used to influence consumers, either as (true) quality signal (information) or as product component or to strategically bias consumer decisions.

Price-based explanations of RPM are not new, they have been discussed in the debates surrounding RPM, in particular in the economic literature, from the very beginning, but they have never been the focus of attention.[477] This is presumably so, because the focus of economics/ economic theory is (usually) put on the role of prices in the allocation of resources,[478] where price is a cost to consumers and the means of exchange between firms and consumers.[479] If only this narrow function of the price is considered, a higher price would have a negative effect on demand; the use of RPM by a supplier could not be explained, as a profit-maximizing supplier would favor a lower retail price. In the service-based explanations of RPM the supplier's interest in the higher price is explained as a cost for services, which can shift the demand curve and thus increase sales. In the price-based RPM models there is no such service that could explain the shift of the demand curve. Instead the desired shift in the demand curve must be explained directly by the price, which is possible only when the wider functions of price are taken into account, in particular price as quality signal and price as utility, either in form of a status signal (conspicuous consumption) or in form of the private satisfaction from consuming a prestigious high-price product (inconspicuous consumption). The reason for why economists have been avoiding the price-based models is that with these models we are moving into markets for the intangible components of the products (information in form of a signal, the aura emanating from a product, the influence of price on consumer preference formation) and into the difficult terrain of consumer preference formation, which welfare economists define away.

In the EU's debate on RPM price-based explanations have been brought up during the last review process of the Vertical Guidelines and block exemption regulation. The Commission considered in its Draft version of the Vertical Guidelines, which was published in the public consultation process preceding the adoption of the current block exemption regulation, that the

[477] See already Taussig (1916). In particular after the Supreme Court's Sylvania decision a price-based model (price as quality signal) was in-depth discussed (in particular in Lafferty *et al.* (1984)), but did not make it into the center of the debate. On this below.
[478] Inderst and Maier-Rigaud (2015: 4).
[479] Inderst (2013: 12) with reference to Erickson and Johanson (1985) ("price determines (for the consumer the reduction in wealth necessary to purchase a product ("price as a constraint"; Inderst (2014a: 5) Inderst and Maier-Rigaud (2015: 4) ("a higher price is merely a higher sacrifice for the consumer"); Inderst (2014a: 5).

supplier may be interested directly in preventing lower prices, in particular in preventing a large distributor from using a particular brand as a loss leader, as this could destroy the reputation of the good ultimately leading to other retailers delisting the product.[480] This consideration did not make it into the Vertical Guidelines, which exclusively focus (at least with regard to RPM)[481] on the service-based justifications of RPM. Neither did the more general claim voiced in the public consultation process by interested parties that RPM is needed to protect the image of the product, price here being a part of the image, gain much attention.[482] Also *Korah* and *O'Sullivan* already mention as explanation for RPM that "rpm may be used to maintain the status of a premium brand rather than to induce the provision of services"[483]. Nevertheless, the price-based explanations never truly made it into the debate.

Similarly, in the US in the wake of the Supreme Court's *Sylvania* decision, RPM in order to protect the price as quality signal was extensively discussed but in the end the similar, but service-based, quality certification model, in which ultimately the store is used as quality signal and RPM is needed to get the quality-reputation dealer to stock the product, took hold.[484] Much earlier even *Brandeis* had argued that the RPM was necessary to protect the reputation of high quality products.[485]

The price models discussed below are closely related to the image-based justifications, which are discussed and applied in the EU with regard to non-price vertical restraints, specifically in the context of selective distribution.[486] There are two image-based justifications for non-price

[480] Commission, Draft Vertical Guidelines (2009), para. 221: "Occasionally, RPM may also be useful to avoid that a large distributor uses a particular brand as a loss leader. This practice of selling below cost as a loss leader will in the short run benefit consumers but may also, if the product is delisted by other retailers, lead to a reduction of inter-brand competition over time to the disadvantage of consumers."
[481] Commission, Vertical Guidelines, para. 107(i) ("'Uniformity and quality standardisation'. A vertical restraint may help to create a brand image by imposing a certain measure of uniformity and quality standardisation on the distributors, thereby increasing the attractiveness of the product to the final consumer and increasing its sales. This can for instance be found in selective distribution and franchising." VGL 2010: para.107 (h)).
[482] See for example Cuatrecasas (2009: 3) arguing that "it is necessary to consider that sales by discount distributors, or at very low prices, may negatively affect the brand image of certain products, particularly luxury ones" and suggesting "including a reference to the possibility of setting minimum resale prices to protect the brand image."
[483] Korah and O'Sullivan (2002: 104).
[484] See in particular the FTC impact evaluation report that compiled several earlier case analyses, Lafferty et al. (62, 65, 135, 137, 151, 152). On this see below II.B.2.
[485] Brandeis (1913: 36) as cited by Grimes (1992: 1295-6).
[486] On the two image-based explanations see Franck (2010). Both have been applied by the Kammergericht Berlin 19.9.2013, 2 U 8/09 (Kart), ECLI:DE:KG:2013:0919.2U8.09KART.0A – *Scout school bags*. The justification based on protecting the image as a component of the product has been highly controversial in Germany, with the Bundeskartellamt firmly refusing to accept such a justification in the context of selective distribution and German courts being split on the issue, which ultimately led to the preliminary ruling of *Coty Germany*.
In the EU protecting the 'image as a product component' has long been accepted in the jurisprudence and was just recently confirmed in ECJ 6.12.2017, C-230/16, ECLI:EU:C:2017:941 – *Coty Germany*, para.; see also CFI

vertical restraints, one concerns the protection of the image as quality signal, the other the protection of the image as component of the product. The first two models discussed below correspond to these justifications, as they consider price as a quality signal (price model 1) and as utility and valued component of the product (price model 2). In both price models the RPM-induced price can also be understood more generally as part of the image of the product. Price model 3 fills an important gap providing a new alternative explanation for the cases in which neither the conditions of price model 1 nor of price model 2 are fulfilled.

II. Price model 1: Price as quality signal (Inderst model)

A. The Theory

Inderst has developed a model in which the manufacturer desires to control the retail price because he faces a commitment problem vis-à-vis consumers and needs price as mechanism to convey information, more specifically, to credibly signal the high quality of its goods.[487] In contrast to the service-based models, in which RPM is used to incentivize non-contractible dealer services, the Inderst model is directly about the price; RPM is used to shift the "price ownership" back to the supplier, who chooses a different retail price as the individual retailer would; under the conditions of the model the price chosen by the supplier through RPM is the optimal choice in terms of efficiencies and welfare.[488]

That price as quality signal can explain the use of RPM has been discussed also in the earlier RPM literature,[489] but *Inderst* (and *Pfeil*) have recently built a formal model and formularized the consumer welfare implications.[490]

12.12.1996, T-88/92, ECLI:EU:T:1996:192 – *Leclerc*; CFI 27.2.1992, T-19/91, ECLI:EU:T:1992:28 – *Vichy*. See also the trademark cases, in which the image as product element justification was first developed before jumping into competition law in the context of selective distribution (ECJ 11.12.1980, Case 31/80, ECLI:EU:C:1980:289 – *L'Oréal*; ECJ 18.06.2009, C-487/07, ECLI:EU:C:2009:378 – *L'Oréal Bellure*.

[487] Inderst (2013: 23).

[488] Absent RPM "the retailers' preferred price may not coincide with the price level that maximizes efficiency and welfare" (Inderst 2013: 19) as "without any mechanism to credibly convey a high-quality image, high quality may not be provided in the market" Inderst (2013: 14).

[489] In particular in the wake of the Supreme Court's Sylvania decision (Continental TV v GTE Sylvania, 433 US 36 (1977)), which rekindled the RPM debate, the "price as quality signal" was as extensively discussed as the "store as quality signal" explanation. See in particular the FTC impact evaluation report that compiled several earlier case analyses, Lafferty *et al*. (62, 65, 135, 137, 151, 152).

[490] The model was originally developed in Inderst and Pfeil (2013). The clearest description can be found in Inderst (2013). The model formally establishes the link between the price and the manufacturer's incentives to

1. RPM as a means to remedy a market failure

(a) The link to *Akerlof's* "market for lemons"

The Inderst model is connected to *Akerlof's* famous "market for lemons".[491] Price in the model is seen not merely as a cost to consumers, but in its information-conveying and quality-incentivizing function; it is used by the manufacturer to solve the information asymmetry that has been identified as a cause for market failure already by *Akerlof*, who describes the welfare-reducing effects of quality uncertainty.[492] *Akerlof* posits that, "[i]f the quality of a product cannot be evaluated before purchasing, and there is no way for the seller to credibly signal the quality of his product, then this may well lead to a situation where only sellers of goods with poor quality remain in the market, at least when products are relatively indistinguishable"[493]. Without a mechanism to credibly signal high quality to consumers, manufacturers may not provide high-quality goods,[494] as when they choose actual quality, they only take into account how this affects demand from consumers who are indeed informed.[495]

While *Akerlof* only shortly suggests trademarks as one possible solutions to the described market failure, noting that trademarks "not only indicate quality [= information-conveying function] but also give the consumer a means of retaliation if the quality does not meet expectations [quality-incentivizing function]"[496], Inderst (2013) offers a formal economic model that shows that the price specifically, which is a component of the image, can remedy the market failure. The Inderst model establishes both, the price's quality-incentivizing function, i.e. a link between price and true quality, as well as the price's function as quality signal, i.e. the link between price and perceived quality.[497]

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continuously provide high quality, i.e. the link between (high) price and (high) true quality. Consumer welfare implication of "price ownership" are modelled/formularized in Inderst and Pfeil (2013: 20-25; 2014: 17-20) (with proof in the Appendix).

[491] Akerlof (1970). Inderst (2013: 14) refers to Akerlof.

[492] Akerlof (1970). Inderst (2013: 14) refers to Akerlof.

[493] Inderst and Maier-Rigaud (2015: 6) (with reference to Akerlof (1970)).

[494] Inderst (2013: 14) with reference to Akerlof (1970).

[495] Inderst (2013: 23).

[496] Akerlof (1970: 499-500).

[497] The main model can be found in Inderst (2013), but was originally developed in Inderst and Pfeil (2013); it is further developed and clarified in Inderst (2013a), Inderst (2014), Inderst (2014a), Inderst *et al.* (2013), Inderst and Pfeil (2014), Inderst and Maier-Rigaud (2015).

(b) The link between price and true quality

The link between price and true quality is established in Inderst (2013) by identifying three effects or channels that work in the same direction so that with a higher price set, quality will be given higher priority "so that ultimately an equilibrium with higher true and perceived quality will arise"[498].

According to *Inderst* the most immediate effect of a higher price on the supplier's incentives to maintain quality at a high level is the "margin effect"[499]. *Inderst* explains that "[w]hen the firm chooses a higher price p, so that the resulting margin is higher as well, the firm has more to gain by sustaining demand through upholding a higher quality"[500]; in contrast, "when quality drops instead, the firm loses demand in those instances … where the consequences materialize from the fact that it shirked", in short "[t]he respective loss of profits is higher when the margin is higher"[501].

As a second effect *Inderst* refers to the effect the higher price has on costs ("cost effect") arguing that "an increase in the per-unit costs, when this is associated with higher quality, has a smaller negative impact on overall firm profits"[502].

The third effect of a higher price is what *Inderst* terms the "elasticity effect". This is the impact of the higher price on demand elasticity, which *Inderst* argues arises "in particular, when not all consumers have the same marginal valuation for quality but when, instead, those consumers who value the product more also have a higher valuation for quality". According to *Inderst* increasing the price "changes the "critical consumer type", i.e. the type of consumer who is just indifferent to purchasing or not purchasing, in such a way that now this type has not only a higher absolute valuation for the product, but also a higher marginal valuation for quality (i.e. he values any incremental increase in quality more)." This means according to *Inderst* that "when the firm changes quality, this now has a higher impact on demand, compared to the case where the price was lower (and with the respective new "critical type", which then has a lower valuation for quality)". In short "by pricing the product high, demand is composed mainly of consumers who not only care more for the product, but also for quality", which "makes demand

[498] Inderst (2013: 23). ("All three effects work in the same direction, so that … one can make the following conclusion: When the price is higher, as set in t = 1, then quality will also be given higher priority in t = 2, so that ultimately an equilibrium with higher true and perceived quality will arise.").
[499] Inderst (2013: 23).
[500] Inderst (2013: 22-3).
[501] Inderst (2013: 23).
[502] Inderst (2013: 19); Inderst and Maier-Rigaud (2015: 8). Also Inderst (2013: 23).

more responsive to changes in quality, which then increases the firm's incentives to indeed provide high quality"[503].

(c) The link between price and perceived quality

Once the link between price and true quality is established, the model, which assumes consumers to be rational, can also show that price and perceived quality are linked as "rational consumers anticipate a link between the price and a manufacturer's incentives to continuously provide high quality"[504]. If a higher price incentivizes the manufacturer to provide higher quality, then it is rational for consumers to expect this and to use a high price as cue for high (perceived) quality. Referring to *Scitovszky*, *Inderst* notes that this can be informally explained with the consumers' "belief that price is determined by the competitive interplay of the rational forces of supply and demand", a belief that prices "are what they are because others found them reasonable and justified"[505].

2. Why retailers would choose different prices

The model must be able to explain why, if higher prices are desired by the supplier to increase demand, retailers would not by themselves choose the same (high) price. *Inderst* identifies two reasons why the interests of the manufacturer with regard to the function of price as quality signal may collide with those of its retailers; both cause retailers to set lower prices than the manufacturer, i.e. both cause retailers to choose a retail price that is not optimal from the perspective of the manufacturer thus making the manufacturer use RPM in order to gain control over the retail price.

The first source of conflict stems from the fact that retailers do not internalize the reputation spill-over that higher prices have on demand on all outlets.[506] When setting the final price the

[503] Inderst (2013: 23); id., (18-9); Inderst and Maier-Rigaud (2015: 8).
[504] Inderst 2013, 2 ("According to this model, rational consumers anticipate a link between the price and a manufacturer's incentives to continuously provide high quality".).
"In equilibrium, rational consumers anticipate the firm's choice of quality: They form rational expectations, so that, still for a given price p, their beliefs must match the truly chosen quality. Put differently, the true quality choice and beliefs must together from an equilibrium, so that, in particular, for these beliefs [] it is indeed optimal for the firm to choose a quality level that matches the beliefs".
[505] Inderst (2013: 13, Fn. 27) and Inderst and Maier-Rigaud (2015: 6) cite Scitovszky (1944: 100-101).
[506] Compare Inderst and Pfeil (2014: 1).

manufacturer takes into account the demand-enhancing effect a higher price may have, if it functions as quality signal.[507] He "internalize[s] the benefits from an overall higher perception of quality … , in particular … , when consumers form beliefs based on their perception of prices across all retailers and shopping trips"[508]; he takes into account not only the full repercussion that pricing has on quality perception, but also on his incentives to provide and uphold quality subsequently (as both must coincide in equilibrium, as consumers are rational).[509] The individual retailer, on the other hand, focuses on increasing sales at his own store and "does not take into account how his price choice affects the overall perception of the product's quality and, thereby, also equilibrium quality choice"[510]. He has an incentive to free-ride on the high quality image that is induced by the higher prices set by other retailers and to choose a lower price at its outlet, even though this will ultimately result in lower true quality as well as lower quality perceptions by consumers.[511] "That is, even when [retailers] are not in direct competition for an individual consumer, e.g. as the consumer simply buys the respective product at the most convenient outlet at any given time, retailers have an incentive to choose a strictly lower retail price than preferred by the manufacturer"[512], because there is "a reputation spill-over across retailers", the individual retailer can take advantage of.

The second source of conflict, which *Inderst* identifies, stems from the fact that retailers have less incentives to keep up the high-quality signal (or image) as this erodes their own bargaining-position vis-à-vis the manufacturer.[513] In the model price affects perceived quality, which in turn affects the outside options of manufacturers and retailers and, thus, their respective

[507] The manufacturer "fully takes into account the implications that individual retail prices have on overall quality perception" (Inderst 2013: 19), i.e. "[it] takes into account, broadly speaking, the full implications of the fact that retail prices convey information to consumers" (Inderst 2013, 28).
[508] Inderst (2013: 25). Also Inderst (2013: 3) ("the manufacturer fully internalizes the effect that price choice has on quality and quality perception across all outlets and all sales, in particular also for the longer term").
[509] Inderst (2013: 27) ("… the manufacturer [] takes into the full repercussion that [pricing] has on both quality perception and his incentives to provide and uphold quality subsequently. (Both must coincide in equilibrium as consumers are rational.)").
[510] Inderst and Pfeil (2014: 24).
[511] Inderst (2013: 3).
[512] Inderst (2013: 25). See also Inderst (2013: I) ("individual retailers have an incentive to free-ride on the overall quality perception and prefer to choose a lower price at their outlet, even though this will ultimately result in lower true quality as well as lower quality perceptions by consumers").
[513] Compare Inderst and Pfeil (2014: 1).

bargaining positions in their long-term relationship.[514] The party that gets to set the retail price may thus instrumentalize the pricing decision to strategically affect his bargaining power.[515]

A higher price and the (in the model) corresponding higher perceived and true quality put the manufacturer in a better bargaining position than the retailer. This is so, because "when one retailer decides not to stock the respective product any longer, then the manufacturer will be able to attract more consumers and sales at other outlets when the product's quality perception is higher, [while] the share of consumers that the retailer that delists this product attracts, and the respective profits, are then strictly lower"[516]. In contrast, a lower price "decreases the outside option of the manufacturer and enhances retailers' own outside option in case they later stock a different product"[517]. Thus retailers may prefer a lower price (and the corresponding lower quality) than the manufacturer.[518]

3. RPM as efficient mechanism

RPM is the efficient solution to the incentive conflict. What the manufacturer desires in an attempt to increase output is the control over retail prices, in particular to prevent retailers to set the retail prices lower than the manufacturer desires. RPM gives him exactly that. This is the great advantage of this price-based model compared to the service-based models discussed in the previous chapter. While the service-based model need (and struggle) to explain why the indirect inducement of services over price is possible and more efficient than directly

[514] Inderst 2013, 29. Also Inderst 2013, 29 ("When there is retail competition, what matters in negotiations between the manufacturer and individual retailers is how easily they can substitute for the counterparty, i.e. by stocking another product or relying solely on other outlets.").
[515] Inderst (2013: 31); Inderst (2013: 29) ("prices [can be] chosen strategically by the party that has "price ownership" so as to affect negotiations in the longer term, here through the effect that they have on quality and quality perception of the manufacturer's product").
[516] Inderst (2013: 29).
[517] Inderst and Pfeil (2014: 4).
[518] Cf. Inderst (2013: 29-30) ("In more informal terms, the manufacturer's standing in negotiations with each individual retailer depends crucially on consumers' perceptions. Certainly when the retail price is higher, this has – as noted above – a direct negative effect on demand. At first, this would suggest that a manufacturer would rather fear that its product is overpriced. However, in the present analysis price is not only a cost to consumers, but it also affects quality perceptions (as it ultimately affects incentives to maintain a high quality level, so that in equilibrium true quality and quality perception are equal). Through this channel a higher price can actually make the manufacturer's product more valuable in the sense that it becomes harder for any retailer to substitute, given that some consumers would then switch to another retailer (or, at least, the bundle of products that a competing retailer could offer would become slightly more attractive to consumers). What the formal analysis says is that through this channel the manufacturer would prefer a higher price and, consequently, a higher quality and higher quality perception than any of the competing retailers.")

contracting for the desired services, here the price itself is what increases efficiency and welfare under the conditions of the model.

4. Predicted effects on welfare

In the model the higher RPM-induced price "affects demand both directly (that is, negatively) and indirectly, namely through the resulting increase in quality and quality perception"[519]. Positive welfare effects result when the latter effect outweighs the former, i.e. when the induced increase in quality dominates the deadweight loss from a higher price.[520] This is found to be the case "when quality perceptions matter more as more consumers must rely on them for their purchases"[521], "when the fraction of consumers who do not observe quality is sufficiently large"[522]. "In this case consumer surplus and total welfare are both strictly lower when retailers individually choose prices in their own interest. The opposite holds when transparency is sufficiently high, so that perceptions matter less"[523]. In the latter case, with rational consumers and only preferences for higher quality and lower price assumed, the price only plays the role of a cost to consumers thus negatively affecting demand and does not serve the information-conveying, quality-inducing function that could outweigh the negative effect.[524] So, in short and this is the most important condition for the model to predict positive effects on welfare, "[f]or the [price's positive demand] effect to matter sufficiently, perceptions must matter sufficiently as well"[525].

B. Analysis of the price as quality signal-model

1. Relationship to the service-based models of the prevailing view

The Inderst model can best be understood, if we consider its relationship to the service-based models that so far have been the focus of the economic debate.

[519] Inderst (2013: 24).
[520] Inderst and Pfeil (2014: 4).
[521] Inderst and Pfeil (2014: 4).
[522] Inderst and Pfeil (2013: 20).
[523] Inderst and Pfeil (2014: 20).
[524] Compare Inderst (2013: 29, Fn. 48).
[525] Inderst (2013: 24).

The Inderst model is closely related to the service-based quality certification model (*Marvel/McCafferty*)[526]. Both models address the same market failure stemming from an information asymmetry, like *Inderst* also *Marvel* and *McCafferty* refer to this information asymmetry;[527] and both models assume that perceived quality will coincide with true quality.[528]

The close link between the two models is reflected in the Lafferty report of 1984[529], which was published in the same year as the service-based quality certification explanation became popularized through the Marvel and McCafferty article. In the Lafferty report both the 'store as signal' as well as the 'price as signal' explanation was in-depth discussed as possible explanations for the use of RPM in several FTC decisions with ample discussion of the underlying marketing literature.[530] So already then the focus could have been shifted away from service-inducement to price, i.e. away from the assumption that what the supplier desires is services (and price only as an indirect means to pay for services) to the assumption that what the supplier wants is directly the price and to a recognition of the price's wider functions, which for long had been acknowledged in the management/marketing literature. Instead the focus remained on services, presumably because economics tends to stick to the price's traditional/narrow function as cost to consumer and its allocative role.[531]

The difference between the models is that the information asymmetry is addressed by different means, the 'service' of stocking the product by a high quality dealer solves the information asymmetry in the Marvel/McCafferty model versus the (high) price in itself in the Inderst model. The economic role which RPM plays in the two related models is thus different. In the

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[526] See above chapter 2 II.A.1.(a)(ii).

[527] Though not explicitly pointing to Akerlof as it Inderst does, the underlying market failure is also recognized by Marvel and McCafferty (1984: 350): "The manufacturer's problem is [] that consumers will underestimate quality unless provided with some form of certification".

[528] Compare Marvel and McCafferty (1984: 950) who point out that in their model "manufacturers cannot overstate the quality of their products."

[529] Lafferty et al. (1984).

[530] Oster (1984: 62, 65) examines the 'price as quality signal' explanation and declines its applicability in the Levi's case (*FTC v. Levi Strauss & Co.*, No. D-9081, 92 F.T.C. 171 (12.07.1978) (consent order));
Greening (1984) considers the 'price as quality signal model' to be applicable in the Interco – Florsheim shoe case. ("A second … explanation for Florsheim's RPM is that Florsheim is directly interested in retail prices, not indirectly interested in retail price as a means to the end of maintaining adequate margins to compensate for retailers' services." (135); similar, id, at 137; also: "Florsheim regarded retail price as a marketing variable of direct interest. That is, Florsheim wanted to control retail price partly because of its direct impact on demand, not solely to adjust retail margins to ensure adequate promotion." (151) "Much of the literature on RPM overlooks this obvious point that retail price is more than a means to the end of achieving adequate provision of retailing services." (152)
The marketing literature is discussed for example in Greening (1984: 137ff.).

[531] Consequently, when the Marvel/McCafferty model was found to be applicable in only narrow conditions (on this above chapter 2 III.B.2.(a)), again the service-focus was kept and the service-based Klein model was developed, in particular through Klein and Murphy (1988).

Marvel/McCafferty model RPM buys the supplier the service of stocking the product from a high quality dealer, RPM is about guaranteeing an adequate margin in order to pay the supplier for the provision of the quality certification service; it is not about protecting the signal or, more specifically, the message/quality of the signal, which is bought from the high quality dealer. In contrast, in the 'price as signal'-model RPM is not only about being able to buy and indirectly pay for the signal, but it is also about protecting the signal as such, its message/quality, namely from dilution.[532] If other dealers offer the good at a lower price, the message of the high price is diluted. Consumers will be confused about whether the price credibly signals quality and start questioning the signal turning to other sources to verify quality, which, so the assumption of the model, is not possible as under the model's assumptions quality uncertainty cannot be counteracted by other signals; the resulting outcome, as seen above, is lower average quality and, ultimately, lower welfare.

It is important to clarify what type of signal is bought here by the supplier from the retailers. The information signal created through RPM in form of a uniform high price does not provide the consumer with information in analytic form, i.e. it is not about enabling the consumer to directly understand the (unobservable) qualities of the product; it thus differs from the information provided under the Telser model, in which the dealer is paid to provide direct information in analytic form to enable the consumer to understand the complex product. Rather than providing direct information, the price provides the consumer with information in condensed/summary form, which is like a symbol which the consumer identifies with high quality.[533] This is again similar to the Marvel/McCafferty model where the stocking of the product of a dealer with the reputation to carry high quality products is the symbol bought; but

[532] RPM is seen here as a means to protect the price signal from dilution. It must be noted though that "dilution" here is differently used than in trademark law, where the term "anti-dilution laws" refers to the protection not of the informative function of trademark, but of the broader (persuasive) function or the emotional component is meant. The link to the "anti-dilution laws" is thus made not here, but later when the price-based models, which focus on price as utility, are discussed.

[533] Similarly, but with regard to the information conveyed through a trademark as symbol, Economides (1988: 526-527) ("This information [conveyed through the trademark] is not provided to the consumer in analytic form, such as an indication of size or a listing of ingredients, but rather in summary form, through a symbol which the consumer identifies with a specific combination of features.").
Inderst, using the terms used in the marketing literature, considers price to be an "extrinsic quality cue", i.e. a cue which is "not directly related to the physical attributes of the product and can be changed without changing the product itself", as opposed to an "intrinsic quality cue" "that can only be changed by changing the product itself" (Inderst (2013: 12); Inderst and Maier-Rigaud (2015: 5) pointing to Rao and Monroe (1989). This is the same difference made here, namely between information in condensed form/symbol (= extrinsic cue) and direct information in analytic form (namely directly on the intrinsic qualities of the product).
A similar distinction is made by Simonson and Rosen (2014), who distinguish between "absolute value" and "relative cues"; "absolute value" refers to "the actual experienced quality of the product for a certain consumer" (id, at 14), which consumers may directly know about (through information in analytic form on the intrinsic quality); relative cues are "relative sources, reference points or quality proxies" (id, at ix).

it is also similar to the trademark, which, as already *Akerlof* noted in his "market for lemons" article,[534] is also a possible solution to quality uncertainty.

2. Relationship to the search cost model underlying trademark protection

This points us to the close link to the protection of trademarks and the economic rationale underlying this protection. Also trademarks are protected as symbols that provide the consumer with information in summary form;[535] according to the (traditional, but now highly disputed) search cost rationale, most prominently advanced by *Landes* and *Posner*, trademarks lower consumer search costs and provide an incentive to the efficient production of quality goods.[536] As in the Inderst model, under the search cost rationale of trademark protection the economic role of the symbol, here the trademark (in the Inderst model the price) is to provide the consumer with information, in form of a symbol, on the unobservable features of the good thereby preventing the situation of a "market for lemons".[537] The difference lies in the symbol. While the consumer identifies with the trademark symbol "a specific combination of features"[538] of the good that have come to be associated with the goods of the particular supplier, the price is necessarily and always connected to quality in general; a high price is identified as high quality independently from which supplier uses it, it is not a symbol whose precise meaning is created by the supplier itself, but it has its particular meaning due to the role of price in the market economy, which rational consumers expect. *Inderst* has pointed here to the very important informal explanation by *Scitovszky* that lies behind the strong link between price and (perceived) quality; namely that it is based on the "belief that price is determined by the competitive interplay of the rational forces of supply and demand", a belief that prices "are what they are because others found them reasonable and justified"[539].

[534] Akerlof (1970: 499-500).
[535] Economides (1988: 526-527) as cited in the previous note.
[536] Landes and Posner (1987: 269-270).
[537] Compare Economides (1988: 526-527): "The economic role of the trademark is to help the consumer identify the unobservable features of the trademarked product".)
[538] Economides (1988: 526-527) as cited above.
[539] Scitovszky (1944: 100).

Like the search cost model of trademark protection, the 'price as quality signal' model of RPM focuses solely on the informative role of the price.[540] It is assumed that the price/trademark is used and necessary to guide the consumer towards the transactions that she would make in any event in an ideal world of perfect information.[541] The consumer is assumed to be sovereign, "a utility-maximizing agent of unbounded rational choice" who "[b]y means of "a mechanical procedure of search", … satisfies exogenously determined preferences, on which [the symbol, in our case the price] are said to have no effect"[542].

3. Conclusion

The price as quality signal model is closely linked to the search cost model, which has traditionally been used to explain and justify the protection of trademarks. Both focus on the information conveying role of a symbol, the price and the trademark, respectively; both assume that through the information provided by the symbol the consumer is merely guided towards the purchase decision she would have made under perfect information.

What we will see though in the next section is that the Inderst model faces the same problem as the search cost model of trademark protection. It is very often not consistent with what is actually happening in real world markets and is able to cover only a very small number of exceptional cases.

C. Apparent likelihood of the conditions of the Inderst model

1. The main view: Inderst

Inderst seems to assume that the conditions of the model are widely satisfied in case of branded products. As seen above the main condition of the model, which is pointed out by *Inderst*, is

[540] On the exclusive focus of traditional trademark law on the informational role of the trademark see e.g. Sheff (2012: 775) with further references. Today, though, as we will see later, the extension of trademark protection towards the protection against dilution of the mark puts this view in question.
[541] Griffiths (2008: 250) with regard to trademarks.
[542] Bebee (2005: 2023) (internal footnotes omitted) with further references.

that price must matter as quality signal, which is the case when true quality cannot be observed by the consumer pre-sale and there is no other mechanism to signal quality.[543]

Inderst makes two claims with regard to the applicability of the 'quality signal model' in real world markets. First, he finds that generally the condition that quality perception matters should be fulfilled in case of branded goods.[544] Second, he finds that more specifically quality perceptions will matter for experience goods, but not for search goods.[545] He argues that even with the kind of (experience) goods, where quality changes quickly in production and distribution and, thus, past experience does not convey information about present or future quality of a product (e.g. where product quality depends critically on care and hygienic standards), price can be an efficient way to signal quality.[546]

Inderst further singles out two situations, in which consumer will frequently rely on price as quality signal as in these situations typically no other mechanisms to learn about the quality of the product are available, namely new products and purchase decisions under time restraints. Referring to marketing studies *Inderst* argues that "[e]arly in the lifetime of a product, only very few consumers will be able to evaluate its true quality"[547], because in case of new goods "consumers have few alternative cues to infer a product's quality"[548]. In addition, price is relevant as quality cue, when consumers have to decide quickly; this is according to *Inderst* so because "[w]hile evaluating and comparing the positive and negative attributes of different products represents a difficult task for consumers, price—by contrast—is relatively easy to compare"[549].

Inderst thus assumes the model to be broadly applicable to branded goods. This is in line with what brand manufacturers in Germany have been claiming themselves. Brand manufacturers in Germany have often expressed their desire to be able to use RPM and lobby for a more lenient approach to RPM justifying the need for RPM (mainly) with the important informative role of

[543] Inderst (2013: 24).
[544] Inderst 2013 (28-29) („ … the present analysis suggests that this is precisely the case where brand image should matter in practice. The identified effect should thus truly matter (more) for branded products."); Inderst (2013: 2) ("This argument applies in particular to branded goods, for which quality and quality perceptions are crucial".)
[545] Inderst (2013: 14) with reference to Nelson (1970) who classifies goods based on their (dominant) information characteristics.
[546] Inderst (2013: 14-5).
[547] Inderst (2013: 14-5) with reference to marketing studies.
[548] Inderst and Maier-Rigaud (2015: 7).
[549] Inderst and Maier-Rigaud (2015: 7). Similar Inderst (2013: 15) with references to the marketing literature; also Inderst (2014a: 5).

price.[550] That the Inderst model was developed on behalf of the (German) Association of Brand Manufacturers (Markenverband) also points into the direction that from the view of brand manufacturers the motive behind the use of RPM is to be able to use price as quality signal.

2. Analysis of the apparent likelihood of the factual conditions

Inderst assumes his model to be broadly applicable to branded goods. It may be to a certain extent relevant that this is in line with what brand manufacturers claim themselves, in particular as due to the strict prohibition of RPM in the EU, in particular in Germany, there is no data on the actual use of RPM, as undertakings are deterred by the clear prohibition to use it. Nevertheless, if a closer look is taken at the factual conditions of the Inderst model, it must be doubted that they are frequently satisfied in branded goods markets and that the model frequently is an adequate explanation for the use of RPM.

(a) The main condition of the model: an informational market failure

As seen above, the main condition of the model is that price must matter as quality signal, which is the case when true quality cannot be observed by the consumer pre-sale and there is no other mechanism to signal quality. If we look at the consumer behavior the marketing literature describes and the implications for firms it draws from it,[551] one would expect that price as quality signal will rarely be necessary, as in the digital environment the role of price as quality signal is, in particular for the following two reasons, declining.

(i) Low search costs and better informed consumers

Inderst points to the applicability of his model for experience goods, but it can be questioned how many experience goods are left in today's markets in view of the abundance of product information, which as the marketing literature shows consumers make ample use of for their purchase decisions.

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[550] See e.g. Sekunde (2016: 169) reporting from an event of the German "Markenverband" noting that several representatives of brand manufacturers emphasized the informative function of the price.
See also Ahlert and Schefer (2013: 75) reporting on their lobbying efforts.
There is a whole strand of management literature in Germany, calling itself the "Münsteraner Argumentationslinie", which focuses on justifying from a management perspective why it is so important for brand manufacturer to control the vertical distribution/value chain, including dealer prices.
See in particular their "economic manifest", Ahlert et al. (2012; 2012a); in English: Ahlert (2012); Ahlert and Schefer (2013).

[551] For an overview of the relevant findings from marketing research see above chapter 3 II.B.

Whether a consumer relies on pre-sale search or post-sale experience to assess the quality of a product, and, thus, whether a good is classified as search good or as experience good, depends on the information costs for the consumer in the specific situation; already *Nelson* argued that "[e]xperience will be used when search becomes too expensive"[552]. So when considering which products can be qualified as experience goods, it must be taken into account that the web has drastically reduced the costs of information to the consumer. Goods, which pre-internet in the offline context may have been classified as experience goods, are turned into search goods due to the low search costs consumer face.[553] One would expect thus that price as quality signal will become less often necessary.

The marketing literature reflects this change. It is true that, as *Inderst* points out, price as quality signal has been for long a key message that marketing scholars communicate to business practitioners"[554] with the retail price being one of the "4Ps" in the firm's marketing mix[555]. But the marketing literature has been following the fundamental shift in consumer behavior due to the emergence of web-enabled technologies and is attempting to define a new marketing mix adapted to the new reality, which it finds requires a fundamental shift in the firm's marketing approach.[556] In particular it attempts to integrate into new marketing models its findings that

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[552] Nelson (1970: 318).
Nelson (1970: 317): "For any good, the consumer has a choice between searching or experimenting to obtain information about the good's qualities."

[553] Similarly the information systems literature points out that "[t]he classification of the same product may differ between online and offline settings" Kim and Krishnan (2015: 2452), though focusing on the opposite direction, where offline search goods turn into online experience goods ("A dress is a search good in the offline market but it should be reclassified as an experience good in the online market because the considerable portion of its features and characteristics (how well it fits or how it feels to the touch) cannot be evaluated before purchase."
Already Stiglitz (2000: 1452) pointed out that the experience goods classification "ignore[s] the desire of both some sellers and consumers to acquire more information [as] [t]hey [do] not need to sit passively by making inferences about quality from price"; today in the new information environment this has become particularly important.

[554] Inderst (2013: 12) with reference to Völckner (2008) and Völckner and Hofmann (2007).
Inderst and Maier-Rigaud (2015:7) note that "[t]he link between price and perceived quality was put to empirical testing very early on in the marketing literature" (pointing to Leavitt (1954)).
Empirical findings on the link between price and perceived quality are discussed in Inderst (2013: 15-16); Inderst and Maier-Rigaud (2015: 7). Cited studies are Völckner and Hofmann 2007 (as a meta-study "that systematically analyze[s] the results from other studies" and that "conclude[s] that consumers seem to apply simple heuristics, such as "you get what you pay for,""); Zeithaml (1988); Rao and Monroe (1989).

[555] As Inderst (2013: 12) explains (with reference to McCarthy (1964)), "the term marketing mix usually refers to the "4 Ps of marketing", which stand for Product (quality, design, functions, etc.), Price (unit price, discounts, credit policy, etc.), Promotion (advertisement, etc.), and Place (sources of selling, inventory control, etc.)".

[556] See for example Simonson and Rosen (2014: xi) ("the mix of influence sources that [] customers rely on" is changing, which is why marketing decisions are changing").
Simonson and Rosen (2014: Part III, 115-191) introduce a new framework for marketing (Part III, 115-191) after noting "that marketing is changing forever because people will rely less on proxies for quality".
While Simonson and Rosen (2014) focus on the shift from relative, extrinsic quality cues to direct knowledge of intrinsic quality, others attempt to grapple with the drastic changes necessary in a firm's marketing due the shift

due to the high transparency created by the web, price and other relative cues are losing their significance as quality proxy in more and more product categories for more and more consumers.[557]

It is true that the link between price and (perceived) quality is, as *Inderst* points out, "based on an overwhelming amount of empirical marketing studies"[558]. The web does not change this pattern, i.e. that consumers use price as proxy for quality; what the web does change is that the situation in which consumers have to decide based on only price cannot be assumed to be a common occurrence anymore, as the web provides consumers with digital information and connectivity whenever wherever they are, a possibility the marketing literature shows consumers make ample use of in the newly emerged "search" economy.[559] Even if already in-store, consumers can (and do) turn digital for more product information, as seen above.[560]

(ii) New more direct forms of information

In addition, the consumer is not only better informed, but also uses different types of sources, different types of relative cues/quality proxies than in the pre-internet era.

We need to go back to the very apt, informal, theoretical underpinnings for why price is used as quality proxy. *Inderst* has pointed us here to *Scitovszky*, who explains that the use of price as shortcut for quality "implies a belief that price is determined by the competitive interplay of the rational forces of supply and demand" and who points out that this belief is justified, "when the majority of buyers are experts and know what they buy" and that then "the prices facing [the

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from vertically-controlled to horizontally-generated (user) or independent (expert) sources, see e.g. Edelman (2010:8) ("The changes buffeting marketers in the digital era are not incremental—they are fundamental.").

[557] The marketing literature describes a shift from reliance on extrinsic or relative cues to pre-sale knowledge of intrinsic quality/absolute value. See Simonson and Rosen (2014: X) ("When consumers can more easily assess absolute values, this means that the influence of "relative forces" (such as branding, loyalty, and positioning) that used to drive predictions of the experienced quality of things is, for numerous products and services, rapidly declining.").
See also Simonson and Rosen (2014: 68-69) analyzing the decline of price as quality cue.

[558] Inderst and Maier-Rigaud (2015: 7) point out that (with reference to Leavitt (1954)) that "[t]he link between price and perceived quality was put to empirical testing very early on in the marketing literature".
Empirical findings on the link between price and perceived quality are discussed in Inderst (2013: 12, 15-16) and Inderst and Maier-Rigaud (2015: 7).
Cited studies are Völckner and Hofmann (2007) (as a meta-study "that systematically analyze[s] the results from other studies" and that "conclude[s] that consumers seem to apply simple heuristics, such as "you get what you pay for,""); Völckner (2008); Zeithaml (1988); Rao and Monroe (1989).
See also Ratay (1993:217) for further references, in particular Bagwell and Riordan (1991) and Olson (1977).

[559] Already Stiglitz (2000: 1452) pointed out that the experience goods classification "ignore[s] the desire of both some sellers and consumers to acquire more information [as] [t]hey [do] not need to sit passively by making inferences about quality from price"; today in the new information environment it will particularly uncommon that a consumer passively relies on price only.

[560] See above chapter 3 II.B.1.

consumer] are what they are because others found them reasonable and justified".[561] As *Inderst* sums up *Scitovszky's* findings "a high price [] reflects high quality because if quality was not sufficiently high, informed consumers would refuse to buy the brand at that price."[562]

With the shifts in consumer behavior described above it is not necessary anymore to take the indirect route over the price to know the quality of experience products, in particular with consumers sharing their consumption experience post-sale online[563] and word-of-mouth being accelerated through the "phenomenal reach, speed, and interactivity of digital touch points"[564]. Consumers do not need to infer the experience other consumers made with the product indirectly from the price, they can do so directly as they have easy and systematic access to the experiences of other consumers with the product. In addition also product tests through independent consumer test organizations are through the web widely and easily accessible[565]. Manufacturer-controlled prices are not necessary as quality assurance mechanism, as, if a product does not hold up to the quality promised, consumers will know about it, in particular due to the advances in search engine technologies[566] and their own search and share behavior. As discussed above, the marketing literature expects that the most often used and trusted information sources are those that are horizontally-generated and provided by other people and (independent) information services, not the vertically-controlled information of the supplier.[567] Already *Nelson* acknowledged the significance of recommendations of others in case of experience goods, but only now in the digital era with its connectivity, have these types of sources gained such a force and significance that the category of experience goods (in the sense of *Nelson*) widely loses its relevance[568]. This includes not only digital sources, but even if not

[561] Scitovszky (1944: 100-101).
[562] Inderst (2013: 13).
[563] Edelman (2010: 5) terms this the „enjoy-and-advocate stage", in which „consumers [] talk[] about their purchases in social networks and post[] reviews online … [and] turn to review sites for troubleshooting.
See also Kucuk and Krishnamurthy (2011: 54) ("Online consumers can become extremely active in the post-purchase stage. Online communities such as epinions and the Internet Movie Database (www.imdb.com) organize review information systematically. Any product can berated and reviewed by one's peers.").
[564] Edelman (2010: 8).
Cf. Asmussen et al. 2013, 1474 ("Beyond traditional word-of-mouth, [consumers] now have access to a broad variety of [user-generated content] platforms such as blogs and microblogs, social networking sites, wikis, and product review or video sharing sites.")
[565] Simonson and Rosen (2014: 11) point out the "[u]nprecedented access to experts: At its peak in the 1990s, PC Magazine's circulation was 1.2 million copies. Today expert reviews are available to anyone who uses the Internet – more than 200 million people in North America".
[566] See e.g. Christodoulides 2009, 143-4 " … alas, if the experience promised by the brand is not delivered. All that is needed is a video about the longevity of the ipod battery and a brand like Apple is suddenly in serious trouble (www.ipodsdirtysecret.com)."
[567] See above chapter 3 II.B.1.
[568] Nelson (1970: 327) ("The recommendations of others will be used more for purchases of experience goods than search goods; ..").

going digital for more information the more likely to be used quality proxy in-store is the stamp of an independent consumer testing organization, not the price set by the supplier.

Overall, it seems thus unlikely that price would often be necessary as quality signal in today's information environment.

(iii) Interim conclusion and link to the EU's inefficiency-argument

Against this background it is not plausible to assume that it is frequently necessary for the supplier in order to solve an information asymmetry as described by *Akerlof* to turn to a RPM-induced, for the supplier very costly, price level as signal for quality. The consumer behavior described in the marketing literature and its implications drawn for firms seem to suggest that there are other means to provide the consumer with the necessary information about the quality of the product. It is unlikely that consumers would need or even value the costly RPM-induced price signal, if price is, as the model assumes, merely information to enable the consumer to find the offer that matches her exogenously defined preferences. If the product is of superior quality, the consumer will be able to know about it – even without an artificially fixed high price signal. Interestingly, this very same argument has been voiced once by *Posner*, who is otherwise known mostly for his proposal of per se legality for vertical restraints including RPM.[569] In the US Supreme Court's *Schwinn* case *Posner*, writing the Brief for United States, condemned Schwinn's attempts to prevent price-cutting in order to protect its reputation as producer of quality bikes, arguing that if the product was in fact superior consumers would know about it and an artificial image based on preventing price-cutting would not be necessary.[570]

At this point it must be stressed again – and we have seen the same above in the analysis of the apparent likelihood of the service-based models, where it was argued that RPM is an inefficient mechanism to induce dealer services – that the argument made here is not that suppliers are using an inefficient and costly means to provide information about the unobservable qualities of a product and should make use of other informational means instead. One must be very careful in the consequences that are drawn from this finding as in the EU from the finding that RPM is inefficient it is often automatically inferred that then negative effects on competition can be presumed or it is insinuated that less restrictive and more efficient mechanism should be

[569] Posner (1981).
[570] Brief United States (Posner) Schwinn (1967: 46).

used instead, which ignores welfare economics' firmly established assumption that suppliers are rational.[571] If suppliers use RPM and RPM is not an efficient solution to provide information on the inherent quality of the product, this can only mean that the motive of the supplier is a different one and one must find a better explanation. It is not plausible to assume that suppliers use an inefficient mechanism as suppliers are assumed to be rational. Rather, what is argued is that the motive of suppliers is most likely a different one, in particular it is not to merely provide information so that consumers can match their exogenously determined preferences to the offer.

(b) Supporting arguments

That the Inderst model is unlikely to explain many cases of RPM and suppliers likely follow a different rationale when using RPM for branded goods can be supported also by the following arguments, which point already into the direction of what could become an alternative explanation for the cases, in which price as quality signal would not be an efficient strategy.

(i) Observed (or desired) use of price as quality signal mostly by established 'premium brands'

The assumption that in case of branded goods there is frequently an informational market failure that is mitigated through RPM is further weakened, if the following is considered. If price were used merely to convey information, RPM would be expected to be used mainly for unknown or lesser known brands, as then the condition that quality perception matters is more likely to be satisfied, which is something also noted by *Inderst*.[572] Nevertheless RPM seems to be used and desired to be used mainly by strong, established brand manufacturers. *Grimes* for example surveys six recent RPM cases finding that each of them involved strong or relatively strong brands,[573] pointing in particular to the use of RPM by golf club manufacturers PING and Callaway, woman accessories of Leegin's Brighton brand, Phonak hearing aids and CIBA contact lessons.[574] In addition, one can observe that it is in particular the established brands, as

[571] On this see above chapter 3 III.C.
[572] Inderst (2013: 14-15); Inderst and Maier-Rigaud (2015: 7).
[573] Grimes (2010: 145).
[574] Ping's use of RPM is documented in its Brief in Leegin (Ping's Brief Leegin 2007), that of Callaway in *MD Products v. Callaway Golf Sales Co.*, 459 F. Supp. 2d 434 (W.D.N.C. 2006), in which Callaway successfully defended its use of RPM based on the unilateral action defense.
Ciba's and Phonak's use of RPM was prohibited and fined by the German *Bundeskartellamt* (Bundeskartellamt, Decision of 14 October 2009, *Phonak,* B3-69/08; id., Decision of 25 September 2009, *Ciba Vision,* B3-123/08.
RPM with regard to Brighton accessories were at issue in *Leegin Creative Leather Products v. PSKS,* 551 U.S. 877 (2007).

organized for example in the German Markenverband, that are lobbying for a more lenient approach to RPM expressing their desire to use RPM as quality signal.[575] That it is the suppliers of established, strong brands that desire RPM, not the suppliers of unknown products that more plausibly may need a quality signal raises doubts as to whether the Inderst model would be able to plausibly explain most instances of RPM.

Also, if we look at the two RPM in cases, in which this explanation for the use of RPM is raised as a defense, these were cases, in which established brands claim to be needing the price as part of the image as quality signal. In the FTC's *Nine West* case Nine West, a manufacturer of women's footwear, argued that without RPM the low prices offered by certain dealers would be "eroding the consumer perception that Nine West products are well-made, fashionable and in high demand"[576], it wanted to prevent low prices as "consumers may incorrectly conclude that Nine West products are lower quality or less desirable"[577]. Also Leegin defended its RPM policy with concerns that low prices may harm Brighton's image and reputation, though the Supreme Court did not note this type of justification when listing potential procompetitive justifications.[578]

The same argument has been made in the 1980s with regard to the Marvel/McCafferty model, in particular by *Klein* and *Murphy*, who argued that RPM was used as a marketing technique by many established, well-known brands, although one would expect RPM, if explained by the quality certification model (here 'store as quality signal'), to occur mostly for new products.[579]

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[575] See e.g. Sekunde (2016: 169) reporting from an event of the German "Markenverband" noting that several representatives of brand manufacturers emphasized the informative function of the price.
See also Ahlert and Schefer (2013: 75) reporting on their lobbying efforts.
There is a whole strand of management literature in Germany, calling itself the "Münsteraner Argumentationslinie", which focuses on justifying from a management perspective why it is so important for brand manufacturer to control the vertical distribution/value chain, including dealer prices.
See in particular their "economic manifest", Ahlert et al. (2012; 2012a); in English: Ahlert (2012); Ahlert and Schefer (2013).

[576] Petition of *Nine West Footwear Corp.* to Reopen and Modify FTC Order, Docket No. C-3937 (30.10.2007), 9.

[577] Id at 9-10.

[578] *Leegin Creative Leather Products v. PSKS,* 551 U.S. 877, 883 (2007)

[579] Klein and Murphy (1988: 291) ("The certification services hypothesis implies that we would expect [RPM] for new, relatively unknown products where the potential free riding is greatest. Instead, we observe [RPM] being used as a marketing technique for many very well-known apparel manufacturers who do not appear to require certification services, while relatively unknown, nonbrand name products infrequently employ the price-maintenance marketing technique.").
Similarly, it was found in the often analyzed Levi's jeans case that Levi Strauss continued to use RPM longer than it would have been necessary as a means of signaling quality, i.e. it was kept even after the Levi Strauss brand had become well-known (Overstreet (1983: 121) pointing to the analyses of the Levi's case by Oster (1983) and Steiner (1985: 178-183)).

(ii) Doubts on the link between perceived and true quality

Doubts on the broad applicability of the 'quality signal model' can also be raised, if we look at another condition of the model, namely that perceived and true quality coincide. As *Inderst* puts it "consumers' quality perception has, in the described model, real implications as, with rational consumers, perceived quality and true quality will ultimately coincide", which is why RPM in the model leads to higher quality.[580] The same assumption is made in the 'Marvel and McCafferty model'[581].

But, as has often been pointed out before, independent consumer tests do not confirm this assumption, but routinely show quite the opposite, namely that very often the higher-priced products are not superior in terms of quality of the physical product to lower-priced alternatives.[582] This observation makes it unlikely that RPM is frequently used as a quality signal in the sense of the 'Inderst model'.

(iii) Doubts on the rational consumer assumption and the sovereignty of consumers

More generally, it may be questioned whether the assumptions, on which welfare economic models in general, not only the Inderst model specifically, are based, are consistent with how branded goods markets function.

With regard to the assumption that suppliers are rational profit-maximizing decision makers there are no indications or plausible explanations why in this particular case this should not be the case, which is why as seen above from the finding that using price as signal for quality would be an inefficient and thus irrational business strategy it is concluded that the supplier must be using RPM in a different, for him efficient way. Even though one may argue that for established brand suppliers who have difficulties to adapt to the digital environment may really not know better and wrongly stick to price as a known and trusted and controllable means of signal, this is not the route chosen here, as it is not clear what could be followed from inefficiently used RPM, in particular as very likely the market will just correct it.

To question the underlying assumption of the model that consumers are rational when making purchase decisions on the other hand is much more promising, because there are indications

[580] Inderst (2013: 28).
[581] See Marvel and McCafferty (1984: 950) ("manufacturers cannot overstate the quality of their products").
[582] Grimes (2010: 117) pointing to the example of a tested washing machine.
See also already Busche (1990: 4) pointing out that the independent consumer test organization 'Stiftung Warentest' cannot back up the finding that price = (true) quality.

that this could truly be the case in the RPM scenarios and, as we will see below, there are also already explanations for the resulting scenario. That consumers are rational has recently been questioned based on cognitive behavioral research and has led to the argument that price may be used as a means to bias consumer decisions.[583] This could explain the above described discrepancy between perceived and true quality and the fact that RPM is desired by brand manufacturers even though there is no information asymmetry that could only be mitigated by price as quality signal. The behavioralist critique on the assumption used in welfare economics that consumers act rational has been refuted though, namely as not being based on robust empirical findings.[584] We will come back to this explanation below, when price model 3 is introduced which is based on *Grimes'* and *Kuenzler's* ideas.

Closely related to the above point is that also the assumption that consumer preferences are exogenously determined and the trademark or, in our case, the price merely conveys information to enable the consumer to match her pre-defined wants with the offer has been called into question in particular with regard to branded goods markets. This is a point that has been made in the debate surrounding the extension of trademark law towards the protection of the mark against dilution;[585] here it is argued that trademarks have turned into brands[586], while the law and underlying economic theory still pretends it is dealing with merely the trademark and its information-conveying and quality-incentivizing function, whose protection can be explained and justified by the welfare economics-based search cost model, refusing to acknowledge the changes observed in branded good markets, in which the trademark's informational function plays only a minor role; this all in an attempt to be able to keep relying on the well-established assumptions of welfare economics.[587] Though it is widely recognized

[583] On this see below price model 3 (section IV).
[584] See e.g. Wright and Stone (2012: 1522).
[585] The term "anti-dilution law" is generally used to refer to laws, in particular trademark law, that protect against interferences with the singularity and meaning of the particular trademark (or, more generally, brand). Cf. Kuenzler (2017: 76) with further references.
[586] For an in-depth analysis of the shift from trademarks to brands see Desai (2012).
Though there is no common definition of what a brand is, it is widely agreed that "brand" has a broader meaning than "trademark". The trademark serves as the legal foundation of the brand (Mittelstaedt (2015: 203); Griffiths (2015: 238)); trademark is "a sign used within economic activities by a producer … to identify a particular product …; it is a 'distinctive sign' that enables offerings of goods … to be – more or less- differentiated, and consequently enables consumers to distinguish between different goods and recognize their provenance" (Ramello (2006: 548)). In contrast, "brand" is "used to indicate far more than source and/or quality" (Desai and Waller (2015: 75)); it "is a trademark … , which through promotion and use has acquired significance over and above its functional rule of distinguishing the goods .. concerned" (Blackett (1998: 8); the brand is considers "to rest in the minds and emotions [of the consumer]" (Appleton and Noble (2015: 49).
[587] Ramello and Silva (2006: 959) pointing out that "[t]he prevailing economic theory tends to resist acknowledging this change, which to a large extent would call into question well-established hypotheses and theoretical tools The general response has therefore been to assume that the informational role of trademark predominates, and to use this hypothesis to construct models, welfare evaluations and policy prescriptions that bear little or no relation to the actual markets".

that the most valuable component of the brand is the emotional/image component,[588] and trademark law protection has correspondingly been extended to that (for trademark owners) most valuable component,[589] economic theory so far as not been able to provide a justification for this extension.[590] It is pointed out in the debate surrounding the extensions of trademark protection that economic theory has so far been unable (or unwilling) to in-depth consider the non-informational role of the trademark-turned-brand, refusing to consider that consumers may need to be treated as indecisive and open to persuasion; economics hides behind the argument that there are no robust empirical findings that could contradict the assumptions used in welfare economics,[591] relegating anything relating to emotion/persuasion to the realm of sociology and psychology[592] with the result that an economic model is used as a rationale for trademark law that is inconsistent with the reality of branded goods markets.[593]

It is very likely that we see a similar dynamic in the attempt to justify the desire of established brand manufacturers to use RPM by the price as quality signal-model, recently formularized by *Inderst*. *Inderst's* argument that the model "should"[594] apply in particular to branded goods

[588] On the high value of the emotional/persuasive/image component of the brand see e.g. Ramello and Silva (2006: 953) with further references. Also Griffiths (2015: 239); Ahlert and Schefer (2013: 75-76).

[589] Compare Griffiths (2008: 266) arguing that "the substantial value that some trademarks can acquire has led to pressure to extend their legal protection far beyond that necessary to ensure they can perform their essential function".
Generally, "anti-dilution laws" are considered to protect the emotional/persuasive component of the brand (see e.g. Klieger (1997: 861, 863), Dilbary (2007: 630)).

[590] Compare Ramello and Silva (2006: 949) arguing that „[a]lthough information economics has yet to find an effective approach for dealing with this newly acquired independence of the sign [where the trademark/sign becomes a valued component of the product/utility], the corresponding transformation of the property right has instead been assimilated with surprising promptitude into the laws and their interpretation, in both the United States and Europe … reach[ing] its culmination with the "anti-dilution" clauses introduced into various national systems".
See also McCarthy (2004: 1163, 1166) pointing out the "doctrinal puzzlement and judicial incomprehension [surrounding] the concept of "dilution" as a form of intrusion on a trademark".

[591] Even though empirical methods in economics are, as seen in chapter 2, quite limited, welfare economists keep insisting on the assumptions of rational consumers and stable preferences putting a "burden of proof" on behavioralist approaches. See e.g. Wright and Stone (1522) emphasizing that the behavioralist assumptions are empirical claims and arguing that "[a]ccordingly, the burden of proof for demonstrating this greater understanding remains upon behavioralist advocates". Also Mitchell (2002; 2002a).

[592] Ramello and Silva (2006: 953) argue that the often-used distinction between informative and persuasive advertising (which reflects the informational versus emotional component of the brand) „is employed to signal that economists are only interested in advertising as an informative means [while] [b]y contrast, persuasive advertising has been relegated to the realms of psychology and sociology, so that humans are once again reduced – for the convenience of economists – into "talking animals" that individually maximize given preferences in markets, thereby reinstating the old familiar analytical categories".

[593] Ramello and Silva (2006: 954) argue that "… in the case of trademark-become-brand, the problem is treated in a similar way: the trademark is simply information useful for recognizing the product. Therefore, once again we are presented with a distorted view of reality. So generally speaking, the neo classical assumptions allow us to reach conclusion consistent with welfare economics, although they are sterile as they concern a never existing world".

[594] Inderst 2013 (28-29) („ ... the present analysis suggests that this is precisely the case where brand image **should** matter in practice. The identified effect **should** thus truly matter (more) for branded products.", emphasis added).

cannot be confirmed by an analysis of the reasonableness/apparent likelihood of the model's factual conditions and ignores the reality that brands are more than a means to convey information on the quality of the physical product.[595] It seems likely that RPM, when used by established brand manufacturers, is similar to the trademark used not as a mere means to convey information to enable consumers to match their stable preferences to the offer; it is more plausible to assume that it is used as part of the emotional/image/persuasive component of the brand, which as noted in the trademark protection debates has become the most important function for which a trademark-turned-brand is used. Similar to what we observe in the economics used to explain and justify the protection of trademarks, also in the economic models examining RPM this reality has been ignored, presumably as the function RPM has for the brand manufacturer cannot be captured (yet) by (formalized) economic models that insist on sticking to the assumption of the rational/sovereign consumer, who is enabled by RPM to fulfill her exogenously determined preferences; just like in trademark economics also in the economics of RPM anything that has to do with emotion is relegated to the realm of psychology and considered to be outside economics.[596]

3. Conclusion: The price as quality signal explanation

In the price as quality signal model the supplier desires to control the retail price through RPM in order to be able to provide the consumer with information on the quality of the (physical) product; price here is seen as an information tool that is an accessory to the product and solves an information asymmetry between supplier and consumers that would lead to a "market for lemons". While the model is fully developed and its prediction of positive welfare effects theoretically sound, the analysis of its empirical validity based on the apparent likelihood standard shows that it will apply only in a very limited number of cases, as an information asymmetry is required that can only be mitigated through the costly mechanism of using price as quality signal. It is unlikely that brand manufacturers would need the artificially high uniform price level to provide the necessary information, thus it is unlikely that price is used merely to convey information on the inherent quality of the product. This does not mean automatically

[595] Similar Desai and Waller (2015: 83) arguing that "[t]he law []has ignored the full role of brands and focused solely on the trademark, source/quality dimension of brands."
[596] Inderst (2014a: 4) for example terms the conspicuous consumption explanation of RPM (on this see below …), in which the price itself is valued by the consumer, namely as a signal to others, the "socioeconomic / psychological perspective"; Elzinga and Mills (2008: 1850) consider it a "noneconomic argument".

that the RPM-induced price is not used by the supplier in an efficient way to increase sales and profits, but an alternative explanation would have to be found. The thesis suggests two alternative explanations for the situation that RPM is used in the absence of an informational market failure, namely that RPM is used either upheld a luxurious image (price model 2) or to bias the consumer decision (price model 3). Importantly, we will see that these two alternatives differ in their prediction of welfare effects, making the decision between the two crucial for the assessment of RPM.

III. Price model 2: price as utility (image theory)

A. The Theory

1. RPM to protect a high class image

While in the Inderst model price is valued by the consumer (and thus provided by the supplier), because it conveys information about the physical product thereby remedying a market failure, the higher (RPM-induced) price itself may be what the consumer values and is willing to pay for as part of the emotional or image component of the product; high prices are part of the product's allure here. The consumer may derive utility directly from the price, which is part of the intangible product component (the image) that leads to a psychological/emotional response of the consumer, for which she is willing to pay. Price is seen here as utility, as it at the same time forms and is part of the image of the product. This explanation is often referred to as focusing on the protection of the image, *Orbach* terms it the "image theory"[597].

A similar explanation is encountered in the context of selective distribution, where the ECJ has recently confirmed in *Coty Germany* that an image can (at least in case of luxury goods) be considered a component of the product so that the protection of said image can be a legitimate aim for setting up a selective distribution system justifying the reduction in intrabrand competition inherent in such system.[598]

[597] Orbach (2010).
[598] ECJ 6.12.2017, C-230/16, ECLI:EU:C:2017:941 – *Coty Germany*, para. 25 with reference to ECJ 23.4.2009, C-59/08, ECLI:EU:C:2009:260 – *Copad*, para. 24-26.

The problem of the price as utility explanation is that there is no fully-developed economic model that could predict the welfare effects. Though this type of demand, i.e. the demand for the emotional component of a good, has been discussed already by Veblen (1899), economic theory has never adequately investigated the demand for the emotional component of the product so that there is no welfare economic model we could turn to[599]; rather economists have been rejecting this RPM explanation as a "noneconomic" argument.[600]

2. Why RPM can increase sales: two types of demand

If we look closely at the price as utility explanation, there seem to be two different types of intangible components / psychological assets attached to the physical product, which the consumer may value and the manufacturer may want to supply and for whose supply RPM may be necessary. The first concerns a status signal, which the consumer values in order to signal to others her status and wealth (*conspicuous consumption*), the second concerns the private satisfaction or benefit a consumer derives from consuming a product with a prestige image attached to it (*inconspicuous consumption*). Often both types of demands are intermingled when RPM to protect image is discussed[601] and often both can be found within one product,[602] though the focus is often put on the conspicuous demand component.

(a) Conspicuous consumption

In the "conspicuous consumption" explanation, which is the focus of *Orbach's* "image theory" of RPM, but goes back to *Veblen*[603], the price or image component is valued by the consumer

[599] Ramello and Silva (2006: 952).
[600] Inderst (2014a: 4) for example terms the conspicuous consumption explanation of RPM (on this see below …), in which the price itself is valued by the consumer, namely as a signal to others, the "socioeconomic / psychological perspective"; Elzinga and Mills (2008: 1850) consider it a "noneconomic argument".
[601] Cf. e.g. Orbach (2010). Though not explicitly, *Orbach* seems to include both conspicuous and inconspicuous consumption in his model (see e.g. Orbach (2010: 287) "Such individuals perceive the status and **happiness** that are associated with the possession of branded goods as a benefit …"); id., at 296 (speaking of the "perceived status and general **happiness** by having something that others do not have"). Emphasis added, "happiness" may refer to inconspicuous consumption of goods with a prestigious or luxury image.
[602] Compare Dilbary (2007: 622) ("a product can be both a signal of status and a source of satisfaction. Hanging a Picasso in the living room is a signal of status for the socialite, but what value does it have for the loner who enjoys only the fact of owning such a piece if not private emotional catharsis?").
[603] "In order to gain and to hold the esteem of men, wealth must be put in evidence, for esteem is awarded only on evidence" (24). By social custom, the evidence consists of unduly costly goods that fall into "accredited canons of conspicuous consumption, the effect of which is to hold the consumer up to a standard of expensiveness and wastefulness in his consumption of goods and his employment of time and effort" (71). (Veblen 1899 as cited by Bagwell and Bernstein (1996: 350)). For an overview over Veblen's theory see Mason (1998).

as a status signal that is attached to the product; the consumer pays here for the exclusivity, i.e. for the fact that only people with a certain (strong) preference or income consume the product, which is ensured by the high price.[604] In case of such status goods, the quality of the product bundle the consumer buys depends (also) on the quality of the message attached to the physical product, i.e. on its ability to communicate social status to others, because it is the desire to communicate information about oneself, about one's status, to others that generates the impulse for conspicuous consumption,[605] which explains why consumers are willing to pay above intrinsic value.[606] Without a uniform high price level the quality of the social signal would be lessened, as diverging discounted retail prices would "dilute" the message the consumer wants to send to others and thus lessen the quality of the signal the consumer is willing to pay for, as others could not be certain whether the consumer has paid the high conspicuous price or rather a lower discounted price. The assumption of this explanation is that a high quality social signal of status can only be supplied through a (uniform) high price.[607]

Condition for the conspicuous consumption explanation to apply is that the good must be publicly consumed so that consumption is observable to others to which the status signal is addressed.[608]

(b) Inconspicuous consumption

The image explanation is widened beyond conspicuous consumption, when a higher RPM-induced price and the upheld image is considered to be valued by the consumer not only as a social signal but also because of the feeling she derives from (privately, inconspicuously) consuming a high-priced prestigious product. This inconspicuous consumption explanation, though not explicitly advanced in the debate, is implicitly acknowledged and inextricably linked

[604] Cf. Orbach (2010: 289) explaining that "[f]or some consumers, high prices are a product feature that confers exclusivity and status" noting that "[f]or their own reasons these consumers want to belong to exclusive clubs that most people cannot afford or for which they are unwilling to pay."
A similar explanation for RPM has been advanced already by Ackert (1995: 1187, in part. 1208-1209), who explains that "a manufacturer has an incentive to maintain high prices with RPM [in case of 'prestige goods']" arguing for an exemption from the RPM prohibition for prestige goods.
Also Font-Galarza et al. (2013: 7-8) refer to this Veblen-based justification of RPM.
[605] Sheff (2012: 803). Similar Orbach (2010: 296) noting that "[t]he "quality" that consumers of status and exclusivity purchase is not necessarily attached to a particular product, but rather to their perceived status and general happiness by having something that others do not have."
[606] Cf. Orbach (2010: 290) on the "willingness to pay above intrinsic value".
[607] Slightly different Orbach (2010: 293) explaining that "[p]rice variation may hurt sales by triggering consumers' questioning of price adequacy and bargain searching. In contrast, uniform prices often maintain consumption habits and discourage aggressive price shopping that pushes prices down".
[608] Ackert (1995: 1192); Franck (2010: 780) with reference to Chao and Schor (1998: 111).

to the above conspicuous consumption explanation for example in *Orbach's* "image theory";[609] it can also be found where the economic justification of the expansion of trademark law beyond initial-confusion contexts is discussed. The consumer here desires and is willing to pay not (only) for the social signal towards others, but for the happiness derived from simply owning (and privately consuming) the product, for the "general happiness [that comes from] having something that others do not have"[610], the "psychological pleasure and private satisfaction"[611]. *Dilbary* aptly points to the L'Oréal slogan explaining that "consumers buy the [higher-priced branded] products "because [they're] worth it""[612]. A uniform high price is assumed to be necessary to create the luxurious aura emanating from the product, without which the consumer can be assumed to not be able to achieve the same level of private satisfaction. A product, identical with regard to the physical components of the product but without the high price attached to it, is assumed to not be able to create the same feeling of owning unique or luxurious goods.[613] RPM is necessary here because, if prices vary, the prestigious image the consumer derives her happiness from is 'diluted' / watered down, she may become unsure about the 'prestigious image' of the product (and begin to question the quality of the physical product itself to confirm the 'prestigious image').

3. Why retailers would chose different (lower) prices

As in all RPM explanations it must be explained why dealers do not act by themselves the way the supplier desires, even though the desired dealer behavior (here pricing) increases sales. In

[609] Though not explicitly, Orbach seems to include both conspicuous and inconspicuous consumption in his model (see e.g. Orbach (2010: 287) "Such individuals perceive the status and **happiness** that are associated with the possession of branded goods as a benefit …"); id., at 296 (speaking of the "perceived status and general **happiness** by having something that others do not have"). Emphasis added, "happiness" may refer to inconspicuous consumption of goods with a prestigious or luxury image.
Similarly Dilbary (2007: 622) who gives as an example that "[h]anging a Picasso in the living room is a signal of status for the socialite, but what value does it have for the loner who enjoys only the fact of owning such a piece if not private emotional catharsis?".
[610] Orbach (2010: 14).
[611] Dilbary (2007: 622).
[612] Dilbary (2007: 622).
[613] Similar Dilbary (2007: 625) though with regard to brand in general, not the prestigious image upheld by a RPM-controlled high uniform price level.
("Even in the case of inconspicuous goods, the psychological freight of which is a pleasant feeling received from an undergarment or invisible cosmetic, the consumer has to buy the branded product. If she buys a physically identical product with an unknown brand, she will not be able to achieve the same level of private satisfaction. The consumer who wishes to reward herself with a new Cartier watch or L'Oréal lotion would not be able to mimic the feeling by buying a knockoff watch (even if no one but her would know the difference) or a generic lotion. She would not enjoy the feeling of owning unique or luxurious goods unless she buys the original product (and pays for the premium).")

our case: If consumers desire a high price as component of the product as a status signal or emotional feeling attached to the product, why would retailers not price accordingly? The reason is that the desired social signal and allure, which in the model is the price or is created through a high uniform price level, is at the same time the cost to the consumer. The consumer despite valuing the 'high price image' of the product and preferring this 'conspicuous price' (the price others think the consumer paid) to be high, prefers to pay actually less.[614] The situation is similar to that in the Inderst model, in which also price is at the same time the cost, but also the utility to the consumer (in the Inderst model through the information about the physical product, which the price conveys, in the Veblen model through the signal of wealth the price provides). Thus the same incentive conflict arises from the fact that the manufacturer takes into account overall demand, while the individual retailer focuses on sales from his outlet thus aiming to divert sales from other retailers.

The manufacturer has an interest to keep an overall high conspicuous price (or at least the pretense of a high conspicuous price) as demand for products subject to conspicuous consumption depends on the utility derived through a high conspicuous price. The individual retailer has an incentive to divert sales from other dealers by lowering the product's (real) price and free riding on the overall high conspicuous price maintained by the other dealers, as the impact on the conspicuous price is marginal in comparison to the gains the retailer can achieve with such a reduction.[615] Dealers have an incentive to free ride on the image upheld by the pricing of the other retailers.

4. RPM as efficient mechanism

RPM, again like in the Inderst model, solves this incentive conflict by shifting back the 'price ownership' to the supplier enabling the supplier to offer consumers the desired status signal by maintaining uniform high prices.

[614] Leibenstein (1950: 203), who incorporates Veblen's insight into economic theory of demand, distinguishes the „real price", i.e. "the price the consumer paid for the commodity in terms of money", from the "conspicuous price", i.e. "the price other people think the consumer paid for the commodity and which therefore determines its conspicuous consumption utility" finding that "the quantity demanded by a consumer will be a function of both the real price and the conspicuous price".
[615] Font-Galarza et al. (2013: 8).

5. Predicted effects on welfare

Though there is no fully-developed economic model that could predict the welfare effects in this constellation, in which RPM is used because the consumer desires the price as part of the product and independent of the intrinsic quality of the product, it is generally assumed that RPM is welfare-enhancing in these cases. Both *Orbach* and *Ackert* point to the consumer's willingness to pay for the goods essentially equating the willingness to pay with consumer welfare.[616] Using the widely accepted assumptions of welfare economics it is easy for them to argue that, if consumers are willing to pay for it, their utility is increased and it is just "another type of ordinary consumer preference that may or may not be wise"[617], but that must be respected as consumers are assumed to be autonomous/sovereign, and that suppliers must be allowed to satisfy. If RPM is necessary to create the desired social signal and emotional feeling the consumer desires, welfare is enhanced, because consumer demand is satisfied.

This is the same logic that is used to justify non-price vertical restraints in selective distribution needed to protect a desired prestigious image.[618] It is also applied in trademark law where the very apt and telling comparison to drugs is made. Drawing the comparison to branded drugs, it is argued that "[consumers] purchase Bayer Aspirin for the same reason they purchase L'oréal lipstick: because "they're worth it"" and because "[t]hey receive their peace of mind not only by taking the pain reliever but also from knowing that it was made by Bayer"[619]. Even placebos are used to describe the utility derived from a high-priced branded product, when it is pointed out that "many times a placebo (a tablet that contains no medication) has medical effects for purely psychological reasons" merely by advertising these effects.[620]

[616] Ackert (1995: 1208) ("Assuming that a primary goal of antitrust is to maximize consumer welfare by giving consumers the products that they want at a fair price, it would seem that a rule that makes it impossible for consumers to purchase what they want is anathema to antitrust. Because a prestige good must have a high price, laws that effectively limit a manufacturer's ability to charge a high price hamper the manufacturer's ability to deliver prestige goods to the consumer."
[617] Orbach (2010: 303).
[618] Buettner et al. (2009: 221).
[619] Dilbary (2007: 627).
[620] Dilbary (2007: 627-8).

B. Analysis of the image-based explanations of RPM

To gain a better understanding of the model it is helpful to look at how it is related to, on the one hand, the Inderst model and, on the other hand, the service-based models of the previous chapters.

1. Relationship to the price as quality signal-model (Inderst model)

For a better understanding of the under-developed price as utility model, it is helpful to look at its relationship to the Inderst (price as quality signal) model by considering what type of consumer demand is satisfied in each of the models. The marketing literature tells us that there are three inseparable demands within a branded product; the first is the demand for the physical product itself, its physical and functional attributes; the second kind of demand is for information about the product's unobservable qualities in form of a (quality) signal; the third demand is for the image and the emotional/psychological effects it has on the consumers and can be divided again in a signal to others (that "educates others about the owner's taste, beliefs, and stature", in case of RPM: status) and the psychological pleasure and private satisfaction derived from the image component of the product.[621]

In the 'Inderst model' RPM is needed to satisfy consumer demand with regard to the second component, i.e. information about the physical product itself. In the image-based 'price as utility' explanation the third component of the product bundle, which forms a branded good, is at issue. RPM is used to meet consumer demand for a status signal to others and/or the private satisfaction that is derived from owning such good and that may be independent of the product's intrinsic quality.

In the Inderst model perceived quality and true quality of the physical product attributes coincide under the model's assumptions; the model is only about the physical product and information about the physical product. The weakness of the Inderst model is that, as argued above, it is not consistent with what can be observed in real world markets, as RPM is desired in particular by established premium brands in markets, in which an information asymmetry

[621] Dilbary (2007: 622-623).

necessitating a price signal is unlikely; in addition perceived high quality often does not match intrinsic quality.[622] In short, the conditions of the model will rarely be satisfied.

In contrast, the 'price as utility model' offers an explanation for exactly the cases, in which the Inderst model does not apply; it does not require an information asymmetry and the high price is part of the product's allure and can in the extreme case be purely fictitious, as here the quality of the product bundle is determined not by the physical good alone, but also by the emotions/psychological effects of the emotional component, i.e. also depends on the quality of the image component, on how pure/undiluted the status signal and the luxurious feeling from owning such status good is. The price as utility model offers an explanation for why suppliers would want to use the high quality signal of the Inderst model, even where there is no information asymmetry that would necessitate such signal; this explanation is that the consumer either as a status signal or for her own private satisfaction values the high price as part of a high quality perception as such, independent of the intrinsic quality of the product.

2. Relationship to the service-based RPM models

If we look back to the service-based models, just like the Inderst model corresponds to the quality certification model it can be argued that the image theory corresponds to the Klein model in the sense that it is the price-based version of the service-focused Klein model. At the same time then the shift in the economic debate from the free riding quality certification model to the Klein model corresponds to the shift from the Inderst model to the image theory; we see the same relationship, which has just been described between the Inderst model and the image explanation, reflected in the relationship between the 'quality certification' model (Marvel/McCafferty) and the Klein model. All four models concern the promotion of high-end or premium brands. The following paragraphs develop this idea and then show how it can help to a better understanding of the underdeveloped image model.

The Klein model was developed as an alternative to in particular the quality certification model, when it was realized that the service- and free riding-based quality certification model was unlikely to be consistent with reality, in particular as RPM was found to be often used by established brands.[623] Similarly the image theory can serve as broadly applicable alternative to

[622] See above II.C.
[623] See above chapter 2 III.B.2(b).

the Inderst model; it covers the cases, in which the Inderst model is not applicable due to a lack of an information asymmetry and a missing link between intrinsic and perceived quality.

In the quality certification model RPM is used to buy a quality signal from the supplier to provide consumers with information on the quality of the (physical) product; like in the Inderst model RPM is used to mitigate a market failure in the form of an information asymmetry, in both models intrinsic quality matches the created high quality signal. The Klein model, in contrast to the quality certification model, is said to apply primarily to branded goods and concerns services that relate to the image component of the product, to its subconscious appeal. In that, it corresponds to the image theory, which can be considered the price-based version of the Klein model. In the Klein model, through guaranteeing the dealer a higher margin the supplier gets the dealer to increase the subconscious appeal of the product, conveying enthusiasm and a high class image are mentioned, thereby increasing overall sales. While the Klein model is, as argued above, unlikely to be consistent with reality for a number of reasons,[624] the price as utility model offers a more likely, because price-, not service-based, alternative to the Klein model. In the price-based explanation the high price is needed directly as it is part of the product's allure.

The benefit of establishing the link between the price-based image theory and the service-based Klein model is that now it can be clarified why *Grimes* had such doubts regarding the positive welfare effects predicted in the Klein model, and the *Grimes'* critique on the Klein model can then in turn be used as starting point for a discussion of the price as utility model:

What *Grimes* criticized in the Klein model, when he complained that the promotional efforts induced by RPM would lead dealers to promote brands independent of their merit, is very likely something very similar to the missing link between intrinsic quality and high price signal seen in the price as utility model, under which the consumer values the perception of a high quality product independent from its intrinsic quality. *Grimes* considered the RPM-induced services of the Klein model to be misleading advertising and argued that RPM in this case could not be considered positive in terms of welfare.[625] While above the debate on the welfare effects that then ensued between *Grimes* and *Klein* was only shortly mentioned (as the Klein model was

[624] See above chapter 3 II.D. arguing that a real world situation, in which all conditions of the Klein model are fulfilled, is difficult to imagine.
[625] On *Grimes'* critique see above chapter 3 II.D.6.

refuted as a whole due to its service focus making it unrealistic), it now offers a valuable input for considering the welfare effects predicted in the underdeveloped image theory.

Table 1: The shift from service-based to price-based RPM models

Branded goods with RPM-induced high perceived quality		
Service-based RPM models	**Price-based RPM models**	
Quality certification model; 'store as quality signal' (*Marvel/McCafferty*)	Price as quality signal model (*Inderst*)	high perceived and true quality coincide
Contract enforcement model (*Klein*)	Price as utility model (*Orbach, Ackert*)	paying above intrinsic quality for the product's subconscious appeal
Grimes' misleading dealer advertising claim	RPM to 'bias' or 'mislead' consumers (*Kuenzler, Grimes*)	paying above intrinsic quality due to "biased" / "misled" consumer decision
Apparent likelihood low due to service focus		

C. Apparent likelihood of the conditions of the price as utility model

1. The current view

It seems to be widely assumed that the price as utility or image model has the potential to cover RPM on quite a few markets, which all have in common – as RPM is used to keep prices up – that they concern products with a high quality / luxurious image. It is assumed that in particular in the case of "luxury goods" (however defined) the model accurately describes the use of RPM (or at least of other intrabrand restrictions, as due to the clear prohibition of the use in RPM, the image model is more widely discussed with regard to non-price restrictions). A difference between conspicuous and inconspicuous demand is seldom made here.

Public consumption examples mentioned for products for which "high prices are part of the product's allure", as *Orbach* puts it, are fashion items from "Burberry, Cartier, Hermes, Louis Vuitton, Manolo Blahnik, Miu Miu, and Versace"[626], "Burberry's famous trade dress or a Cartier watch"[627]; furthermore "perfume, expensive cars, and designer clothes", in particular "[a] Rolls Royce, a bottle of Obsession fragrance, and Gucci loafers"[628]; fashion, jewelry (in particular Tiffany[629]), Leica digital cameras, Noka chocolate.[630] More generally, "products intended to impress guests or donees"[631] are mentioned. Though primarily these seems to be products where functionality plays a minor role, it has also been posited that conspicuous demand may apply to products of everyday life and daily use, such as sportive leisure shoes, mineral water and pens.[632] Examples for inconspicuous goods, for which consumers have been assumed to be willing to pay for a price-generated prestigious image, are Calvin Klein underwear, L'Oréal body lotion and L'Oréal lipstick.[633] The example most frequently mentioned (mostly in the discussion of non-price restraints in selective distribution networks) are cosmetics, in particular perfumes, here the physical components of the product are said to be of minor relevance compared to the image.[634]

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[626] Orbach (2010: 288).
[627] Dilbary (2007: 625).
[628] Ackert (1995: 1187, 1189).
[629] Orbach (2010: 289).
[630] Orbach (2010: 287-288).
[631] Ahlert and Schefer (2013: 27) citing Greipl (2012).
[632] Franck (2010: 779).
[633] Dilbary (2007: 622, 627).
[634] Cf. e.g. Monti (2013: 499).

The accurateness of the model for high priced "luxury" goods is often readily and without much analysis assumed, in the context of selective distribution there are even arguments that already the fact that the supplier uses the vertical restraint is the critical piece of evidence that the restraint is welfare-enhancing as a rational supplier only adopts the restraint, if demand can be increased.[635] What has led to such automatic conclusions is that there is no alternative explanation recognized for why the supplier in these instances would adopt the restraint – with the exception of the narrow negative models that too rarely fit and the narrow price/image as quality signal model, in particular there is none that would fit the welfare economics' basic assumption that consumers are rational and preferences are stable.

2. Doubts on the accurateness of the price as utility model

Nevertheless, if we look at the apparent likelihood of the models' conditions, there are several arguments that weaken the model pointing into the direction that it is unlikely that the model accurately describes RPM on image-led markets suggesting that in particular the prediction of positive welfare effects could be problematic.

There are three reasons why the prediction of positive welfare effects appears problematic and we will look at each in turn. First, in general there is a lack of systematic economic research on the demand for the emotional component of the product so that there is no firm established basis for the prediction of welfare effects, where increased sales are the result of psychological effects. This is particularly suspicious, because, second, in the model the high price perception is not linked to the intrinsic quality of the product, which raises the question of whether consumers in the situation the models describe are truly rational or rather being misled by a false signal of high (intrinsic) quality. Third, it is problematic that what is ultimately created through RPM is an artificially scarce product, even though there is the alternative of naturally scarce products.

(a) Welfare economics ignores emotions

As already pointed out above there are no economic models that systematically deal with the demand for the emotional/image component of the product so that the welfare effects on image-led markets are unclear at best. Economics is geared towards dealing with the demand for

For empirical evidence on conspicuous demand for cosmetics see Chao and Schor (1998: 107, 109-112, 114-121).

[635] See for example Buettner et al. (2009: 204) arguing that "the critical piece of evidence in a vertical restraints case is the simple fact that the supplier is adopting the restraint".

tangible goods and services,[636] which is presumably another reason why for long RPM explanations have been focusing on services, going the very complicated route over insisting that RPM is more efficient than directly contracting and paying for the services. The price as utility model has no possibility to point to RPM-induced services and has to achieve/take on the difficult task of finding a plausible explanation for why consumer desire the higher-priced item and are happy/derive utility from the RPM-induced higher prices, when there are no added services. The high price itself becomes part of the product's allure due to the psychological effects it exerts, which the consumer is said to value independent from the physical product as such because it provides her with a social signal to impress others and with the happiness that comes from merely owning a high-priced item. In essence the price as utility model justifies here that a high price increases demand, something which in economics generally is considered a rare exception, with psychological effects, although welfare economics normally refuses to deal with psychological processes and in particular defines them away for example by considering consumer preferences stable. This reliance on psychological effects of the price as utility model is exactly why welfare economics has so far not developed (and refused as "non-economic") image- and status-based explanations of high-price strategies and why there is no fully-developed image-based model. Economists shy away from the price as utility model and rather rely on the Inderst model to explain the use of RPM by premium brands, which neatly fits into the logic of welfare economics, but ignores the market realities of branded good markets, in which the model's assumptions will be rarely satisfied. Or the focus is put on *Bork's* broader more general claim that - unless there is a different market power/collusion-based explanation – RPM must somehow (*Bork* is pointing to distributive efficiency, the Commission to optimizing the complementary activities in the supplier/retailer relationship) increase sales (otherwise the supplier would not use it) and thus must somehow make consumers happy (otherwise they would not chose to buy the offer) choosing to not look too closely at the "somehow" and holding on to the vague claim that something about the product would have to be improved because otherwise the consumer would not be willing to pay the higher price for it.

In situations in which demand not for the tangible product but for the intangible image-component is satisfied it becomes problematic that in welfare economic models "consumer

[636] Ramello and Silva (2006: 952-953) ("Economists in general, and in particular neoclassical economists, essentially lack the proper analytical tools for investigating these issues, which are deeply rooted in the heart of the post-industrial economy. It follows that unlike marketing, economics is geared toward dealing with tangible goods and services as the objects of production and exchange.").

[preferences] are treated simply as the decisions of autonomous maximizing agents, each acting in isolation from the rest of society" while "[a]ctually, preferences are influenced by those made by others and, above all, by firms"[637]. Presuming consumer preferences to be stable in case of image-led markets needs to be thought through, as the demand that is served by the supplier (here through an RPM-upheld image) is that for emotional/psychological effects on the consumer – how can the consumer preference be assumed to be stable, to be merely revealed when at the same time what the consumers desires and gets offered is a psychological effect, a feeling, an emotion created by a price that is shielded through RPM from market forces? Simply applying the same willingness-to-pay test used for the demand for tangible products, although what is desired is an intangible appeal/perception of the product, which is created in the consumer's mind, in which also the consumer decision is formed, appears risky in particular where the high price itself is said to be part of the product's allure and the desired perception can be purely fictional.

(b) Are consumers really rational?

Problematic is in particular that in the case of the price as utility model the high price and prestigious image, for which RPM is necessary, may not reflect true quality; what the consumers values in the price as utility model is directly the high price and its psychological effects, which may be purely fictional and does not depend on the product's intrinsic quality. The question is whether such an emotional component can really be found to increase the utility of the consumer, as the proponents of the price as utility model suggest.

Welfare economics leaves no room to argue otherwise, as it unwaveringly adheres to the willingness-to-pay test, based on a subjective theory of value, refusing to consider an "objective theory of value"[638]. *De gustibus non est disputandum* is the doctrine that is not questioned, thus preferences are considered to define what makes the individual better off so that it is a conceptual impossibility to argue that some preferences are mistaken or may make the individual worse off.[639] In the welfare economics logic it is impossible to argue that observed choices run counter true preferences, because observed choices is what provides the only reliable information about preferences, they "reveal" preferences.[640] The claim in the price as utility model that, if the consumer is willing to pay for the image, even though the quality of

[637] Ramello and Silva (2006: 952-953).
[638] This is the term used by Crane (2015: 134).
[639] Aldred (2008: 273) explaining the doctrine, which is based on Stigler and Becker (1977).
[640] Aldred (2008: 237).

the physical good to which the image/status signal is attached does not match the high price, then the consumer must derive utility from that image, is based in this welfare economics logic.

But is it really so clear that the consumer is not mislead by the artificially created high price level? Is the high price, in the mind of the consumer, not so intrinsically linked to high (intrinsic) quality that a case, in which the consumer values the image truly independent from the intrinsic quality of the product, is impossible to find?

(i) General doubts due to the role of price as quality signal

Doubts arise in particular if we look at the link to the Inderst model. Rational consumers, as seen above in the Inderst model, identify a high price with high quality (of the physical, not necessarily functional product attributes) because they expect that in the market economy prices reflect the past experiences/preferences of consumers, that prices are a product of the competitive interplay of the rational forces of supply and demand.[641] Where there is no information asymmetry, which would be necessary for the Inderst model to apply – can we be sure that the fictional, artificially created price level is not merely used to falsely signal high product quality? A high price means high quality – is this link really broken apart, if a good is valued as social signal/ for its prestigious image? Or is the consumer mistaken in the expression of her willingness-to-pay and cannot be assumed to act rational? If so, it would be implausible to apply the willingness-to-pay test in the image model, its prediction of positive welfare in the image theory would be incorrect. Also Posner in his Brief in *Schwinn* argued that "[e]ither the Schwinn bicycle is in fact a superior product for which the consumer would willingly pay more, in which event it should be unnecessary to create a quality image by the artificial device of discouraging competition in the price of distributing the product; or it is not of premium quality, and the consumer is being deceived into believing that it is by its high and uniform retail price"[642].

Here the connection the *Grimes'* critique on the Klein model can be made as the argument is similar to what *Grimes* argued with regard to the Klein model, whose prediction of positive welfare effects he questioned. *Grimes* posits that the increased sales, which result from the promotion induced by RPM under the Klein model, cannot be equated with heightened consumer welfare, because the induced promotion is misleading, non-informational or down-

[641] Scitovszky (1944: 100).
[642] Posner Brief *Schwinn* (1967: 46-7).

right deceptive, exploits consumer information gaps inducing distorted buying decisions. At this point the argument made here is that just like with the Klein model also in case of the price as utility model doubts arise that the willingness-to-pay test leads to a plausible prediction of positive welfare effects. Though it is not clear what would be the alternative to applying the willingness-to-pay test, it points to the possibility that there is room for an alternative explanation of RPM, in which consumers are not rational and which could cover the cases in which consumers are indeed mislead; such alternative has been becoming more plausible with the advances in behavioral economics based on cognitive psychologic research and will be discussed below as price model 3.

(ii) Examples

To illustrate the doubts the case of Noka chocolate is a good example; interestingly, Noca chocolate has been cited by *Orbach* to illustrate his price as utility explanation, at the same Noca chocolate is cited in the marketing literature as an example for the shift from relative to absolute value, i.e. as an example that consumers increasingly are interested in the intrinsic values of the product and not satisfied with a built perception that does not correspond to the product.

Noka chocolate, for *Orbach* an example of a status good that is supposedly valued by consumers for the signal/image attached to it, is described by *Orbach* as "one of the world's most luxurious chocolate brands" that, "[t]o perfect its luxurious status, [] matches signature chocolate bits with astronomic prices"[643], $ 309-$ 2,080 per pound. Nevertheless when it became public that Noka Chocolate was not as luxurious as the high prices suggested, because "a Dallas-based food blog published a detailed ten-part series that questioned the company's marketing claims, evaluated its products, and argued that the chocolate is not worth the price the company charges", the company that set out to position its chocolate "as the Rolls-Royce of dark chocolate" through charging high prices went out of business[644]. Consumers after all were not satisfied by the high value perception, but had expected the intrinsic quality to match the artificially upheld high price.

[643] Orbach (2010: 288).

[644] Simonson and Rosen (2014: 69-70) who report the Noka story as an example how the newly emerging transparency leads consumers to more rational, better decisions. They report that "[w]hen [they] search online to learn more about the brand, [they] quickly came across blog entries such as "NOKA chocolate exposed!" and "Noka Chocolate Is A Scam".

But also in another category there are doubts documented as to whether the prestigious image is valued by the consumer independent of the intrinsic quality of the good: In a study by *Gosline* nearly half of the studied buyers of faux luxury handbags ended up buying the real brand within the first two and a half years after the purchase, in part because they were disappointed by the quality of the product.[645]

(c) Artificial scarcity: Would consumers not prefer naturally scarce goods?

There is another argument that raises doubts as to the model's accurateness: The prediction of positive welfare effects in the image theory based on welfare economics' willingness-to-pay test is problematic, if it is considered that the demand satisfied under the model, in particular the psychological effects arising from the good's high price, can be satisfied also by products that emanate the luxurious aura because of their inherent quality, i.e. by goods that need not be made scarce through an artificially kept price level but that are naturally scarce. Put differently, a problem for the model could be that the same psychological effects the consumer is said to desire in the model can also be created through a product that actually is of premium quality. This hypothetical choice may be relevant for the prediction of welfare effects as it means that there is no market failure that needs to be remedied through RPM.

Proponents of the price as utility explanation stress that, if consumers are willing-to-pay for products with artificially high prices because of the status and exclusivity that comes with them and independent of the inherent quality of the good, then suppliers need to be given the possibility to satisfy this demand. *Ackert* for example posits that "[b]ecause a prestige good must have a high price, laws that effectively limit a manufacturer's ability to charge a high price hamper the manufacturer's ability to deliver prestige goods to the consumer."[646] But what if there is an alternative to satisfy said demand?

In the trademark literature it has been stressed that high quality social status signals as well as high quality prestigious images and high prices can also be created differently than based on the artificial scarcity/ artificial high price upheld by RPM, namely by producing naturally (and not merely artificially) scarce goods.[647] RPM in the scenarios of the price as utility model is not needed to prevent a market failure; the alternative to protecting the uniform high price level,

[645] For a summary of *Gosline's* findings see https://www.forbes.com/2010/02/11/luxury-goods-counterfeit-fakes-chanel-gucci-cmo-network-renee-richardson-gosline.html#48580ab64f54.
[646] Ackert (1995: 1208).
[647] Sheff (2012: 823).

desired by the supplier, against dilution through diverging retail prices, is not a lemons-like market failure like in the Inderst model. The argument that RPM is necessary because otherwise consumer demand for prestigious goods cannot be satisfied oversees the supplier's possibility to produce naturally scarce goods, i.e. goods that emanate the desired allure because the physical product the image is attached to is indeed of premium quality. In case of naturally scarce resources "market forces – the high prices that result when demand for social status outstrips supply of the medium of its allocation – will restrain some (especially poorer) consumers from expressing their desired message" thereby creating a credible status signal,[648] which is in particular possible in the newly emerged transparent information environment, where consumers are much better informed about the quality attributes of a product. Unless there is an informational market failure like under the Inderst model making a high price necessary as quality signal, the superiority of a product will be known and be able to create the desired image; artificially inflated prices are not necessary to protect the prestigious image where the product is actually of premium quality, as premium quality will be known. With regard to the market for status goods, it has been emphasized, that this is actually what *Veblen* observed and documented, namely the conspicuous consumption of naturally scarce goods. That today instead of naturally scarce Veblen *goods* artificially scarce Veblen *brands* are mostly used is a consequence of the ever-expanding trademark protection.[649]

As a reply to this concern proponents of the price as utility model claim that artificially scarce products are the more efficient solution compared to naturally scarce products. They concede that naturally scarce goods are an alternative to the artificially scarce goods that require RPM to protect the image and hold the price artificially high,[650] but claim that the production of naturally scarce goods is an inferior, less efficient alternative and that the shift from the production of naturally scarce to artificially scarce goods is socially desirable and enhances welfare. *Orbach* for example posits that, while "[i]t is always possible to add features to a product or to alter features to justify high prices that establish the exclusivity characteristic of status goods", "RPM may offer a relatively inexpensive production technique for status goods because it requires a smaller investment in physical product features" so that "[a]s such, RPM may be superior to alternative methods of status-good production" and "[b]ans on RPM may

[648] Sheff (2012: 816).
[649] On the shift from Veblen goods to Veblen brands see Sheff (2012: 802).
[650] See e.g. Orbach (2010: 302) noting that "status goods will exist even without RPM".

divert the market to less efficient methods of status-good production that are less socially desirable"[651].

This is the same argument that is used to justify the extension of trademark protection to post-sale confusion cases.[652] It is considered "[t]he great innovation of Veblen brands [to] enable conspicuous consumption without requiring the waste of naturally scarce resources", without the material waste – the waste of labor, waste of precious materials, waste of time that came with the conspicuous consumption of naturally scarce resources as status goods.[653] In this logic RPM is efficient because it enables suppliers to meet the demand for status signals by creating through RPM (as part of a branding strategy) artificially scarce products, preventing "the diversion of resources from socially valuable productive uses to socially wasteful competitive consumptions"[654]. That "[y]ou can build a brand without killing trees and few precious raw materials are needed in their creation", that "brand value creates pleasure and confers status as surely as any more wasteful (i.e. tangible) value", that "brands actually succeed in making us happy with less", that "actually intangible value, in many ways is a very, very fine substitute for using up labor or limited resources in the creation of things" are claims by a marketing executive that are actually cited in defense of protecting the artificial scarcity against dilution.[655] To put it back into the RPM context, that suppliers can satisfy consumers with the purely fictional placebo image of a prestigious product without having to invest in the (physical) product, is found to be a production method that needs protection and is welfare-enhancing, and in our particular context is used to justify the restriction of intra-brand competition.

That RPM-induced artificial scarcity is the most efficient solution to the supplier's problem of how to make a good more costly, which is necessary in order to be able to create a status signal or prestigious image[656], may be claimed by producers, but this can be doubted. Producing more costly, better, more prestigious (status) goods does not automatically come with material waste, as *Orbach* argues. Due to the ever-increasing transparence in product markets (a consequence, as we have seen, of the web-enabled technologies and the consumers search behavior) it may suffice to optimize manufacturing processes to produce a truly valuable good – and this does

[651] Orbach (2010: 302).
[652] On the doctrine of post-sale confusing in US trademark law see Sheff (2012), who describes the doctrine as "the key weapon in the arsenal of luxury brand owners" (773).
[653] Sheff (2012: 825).
[654] Sheff (2012: 825).
[655] Sheff (2012: 826) citing from Rory Sutherland's blog (Sutherland: 2007) and TED talk (*Life lessons from an ad man,* https://www.ted.com/talks/rory_sutherland_liFe_lessons_From_an_ad_man/discussion, 15.07.2009).
[656] Compare Sheff (2012: 801) noting that " … attempts to claim wealth-based status must somehow be made costly to the claimant".

not even have to concern the function of the product alone as there are also new demand factors emerging, for example those that can be loosely subsumed under the term of corporate social responsibility. These factors do not necessarily concern directly the composition of the physical product or its function, but they are more tangible than the purely fictional image marketers have in mind that they find so wonderfully resourceful of productive resources. Production processes, working conditions and ecological impact give ample room for suppliers to make their products more costly and fulfill the demand for prestigious status goods that do not come with a waste of resources. This sheds doubts on the proposition that it is more efficient to let suppliers create artificially scarce goods that require the elimination of intrabrand competition to keep up the high quality image and high price than to let supplier to resort to the production of naturally scarce goods. Also – would a hypothetical consumer not prefer a naturally scarce over an artificially scarce good?

(d) Difference to relative utility argument

There is another argument that has been raised against the model, which is only shortly mentioned here, as this is not what the thesis argues.

Others have questioned the welfare effects of conspicuously consumed status goods in general (independent of whether naturally or artificially scarce) based on the fact that the utility the consumer derives from the social signal attached to the product is a relative utility, i.e. a "utility that one derives from how one's consumption compares to the consumption of others"[657]. The argument, which has been used in particular in the context of the ever-expanding trademark law doctrines, is that, while conspicuously consumed status goods may increase the utility of the consumers of said status goods, it at the same time imposes a negative externality on others, which overall may lead to a welfare loss; in short, "[s]ocial welfare may not be increased … because status is relative, and one person's gain is another's loss"[658]. Others have countered that there will always be the desire to signal status and wealth and argued that conspicuous consumption of status goods is the prevalent option listing reasons for why more direct modes

[657] Beebe (2010: 825) with further references to the economic theory on relative utility.
[658] Aldred (2008: 274). Similar Sheff (2012: 824).
For the view that the production of status goods has positive effects on welfare see Mason (1998: 1-11) (as cited by Sheff (2012: 824) with an argument based on *Mandeville's* 1714 "The Fable of the Bees: or, private vices, publick benefits".

of social signaling of status cannot be used and the signal thus must be attached to a physical product.[659]

The thesis choose not to question the welfare effects of status goods in general; it rather – as in the arguments above – questions only the effects of status goods that require RPM to keep up the desired high-class image attached to the product, i.e. questions the welfare effects of status goods that require the elimination of intrabrand price competition through RPM.

D. Conclusion: A problematic model that requires further analysis

The price as utility model, in which the consumer is willing to pay a premium above intrinsic value because she derives utility from the RPM-protected status signal towards others (conspicuous consumption) or from the private satisfaction from consuming a good with a prestigious image (inconspicuous consumption) leaves the chartered terrain of economics, which is geared towards dealing with the demand for tangible goods and services. This is why this explanation has been largely ignored by economists who consider this to be a "noneconomic argument"[660] for RPM and this is also why there are doubts regarding the accurateness of the model.

The assumption that a consumer values the prestigious image and/or status signal, even if the quality of the (physical) product does not match the image, is highly problematic, as rational consumer in a market economy will in general identify high price with high (intrinsic) quality. As a result it must be cautiously assessed whether the consumer truly values the image independent from the product; in particular because – as we will see below[661] – there is an alternative explanation for the situation the model describes, in which the consumer is misled instead and welfare possibly reduced.

In addition, even if there are instances, in which consumers are aware that what they get is a prestigious image that is not reflected in the physical product to which it is attached, but merely upheld through an artificially high price level, the prediction of positive welfare may have to be doubted as there is no market failure and the demand for prestigious status goods can also

[659] Sheff (2012: 798ff.); Dilbary (2007: 623).
[660] Elzinga and Mills (2008: 1850).
[661] Section IV below (price model 3).

be met by naturally scarce goods that can produce the same type of image but without the elimination of intrabrand competition as the desired emotional effects can also be created through naturally scarce products. This raises not only the question of how to incorporate such hypothetical choice considerations (does the rational consumer not prefer naturally over artificially scarce goods?) in the welfare analysis, but also the possibly insolvable empirical question whether artificial or natural scarce goods are more efficient in terms of welfare.

Chapter 5 will return to the model and follow up on these findings from a broader perspective with a view to what legal implications can be drawn.

IV. Price model 3: price as strategic means to 'bias' consumer decisions

There is a third explanation of RPM in the literature emerging, in which it is directly the price, and not the inducement of dealer services, that is desired by the supplier in order to increase sales.

We have seen above that in the price as utility model the supplier uses RPM because the consumer is willing to pay above intrinsic value because she values the price as a product feature that confers status and exclusivity. But it is also conceivable that the consumer is willing to pay above intrinsic value not because she values the price in itself due to the emotional response it creates, but because she is making a poor decision based on the false quality signal sent by the RPM-upheld artificially high price level.

RPM then is used by the supplier not to create a desired product component in form of a high price but to skew the consumer decision. Though very similar to the explanation of RPM given by *Grimes*, when criticizing the use of the output/profitability test in the Klein model,[662] this explanation of RPM has gained strength only recently through the support it has found in behavioral economics.

In what is called here the consumer bias model the uniform price generated by RPM is used to 'bias' consumer decisions, to strategically create (by the use of heuristics, here a uniform price) "consumer beliefs about objective product qualities that are objectively mistaken, and yet

[662] On *Grimes'* critique and doubts on the Klein model see above III.B.2. and chapter 3 II.D.6.

resistant to correction by exposure of the consumer to objective evidence"[663]. This explanation, originating in brand scholarship and marketing, transferred into the antitrust debate on vertical restraints by Kuenzler (2017; 2017a), is connected to the behavioralist critique on the rational behavior assumption of neo-classical welfare economics, because it argues that the RPM-secured uniform price level is used by suppliers strategically to manipulate the divergence between rational and boundedly rational behavior.[664] The model thus enters the difficult terrain of the relationship between marketing and preference formation leaving behind the safe assumptions of welfare-based economic models of rational consumers and exogenously determined preferences.

A. The Theory

Based on *Kuenzler's* more general account on the important cognitive function of intrabrand competition as a 'debiasing' mechanism the use of RPM by suppliers can be explained as follows.[665]

1. Why RPM can increase sales, even if perceived and true quality differ

In the bias explanation RPM is used by the manufacturer to alter perceptions of value in order to increase a consumer's willingness to pay. Under the assumptions of welfare economics this assumption is not conceivable as consumer decisions are considered to reveal preferences and thus increase utility independent of how the consumer decision is formed and thus even where the consumer decision is based on an RPM-induced artificially high price level. That in this constellation it is plausible to diverge from welfare economics' assumption is shown based on cognitive psychological research.

Kuenzler points to cognitive psychological research that shows that consumers use 'initial anchors', such as the price, to estimate the value of goods[666]; these initial anchors can be arbitrarily set, because, rather than having a good sense for fundamental valuations of products

[663] Sheff (2011: 1253).
[664] Sheff (2011: 1253).
[665] On intrabrand competition as "debiasing mechanism" see Kuenzler (2017: 100).
[666] Kuenzler (2017: 87).

and services, consumers merely possess a certain range of tolerable values; importantly, this is found to be true even under conditions where consumers are given complete information[667]. It is found that, once the anchor point has been set, subsequent valuations are coherent, i.e. are carried out in a way that is consistent with the initial estimate.[668] This coherence shows according to *Kuenzler* how strong the initial (arbitrary) anchor is.[669] When applied to the practice of RPM one may argue - similar to *Kuenzler*, who constructs a more general argument with regard to dilution laws - that suppliers when seemingly using RPM to protect the subconscious appeal of a product, they do so not to create and protect the quality of an 'prestigious image' or 'status signal', for which consumers are willing to pay; instead they use RPM as a purposeful strategy to lure consumers to an arbitrary initial anchor in form of a uniform high retail price level; this strong initial anchor lets suppliers reframe the market in order to win market share by making consumers feel different about the product so that consumers no longer use other available information as grounds for their decision.[670]

Kuenzler explains based on *Margolis'* distinction between 'seeing that' and 'reasoning why' how the setting of a strong initial anchor, in our case a uniform high-price level, can cognitively 'lock-in' the consumer, meaning that even if the consumer learns about the actual inferior intrinsic quality of the high-priced good through (hard) information on product use and attributes (*Kuenzler* refers to the type of information that consumer test reports examine), the consumer will still subconsciously feel that the good is of superior quality and pay happily for the perceived high quality. "People automatically and subconsciously 'see that' something holds true. They then try to find explanations, or 'reasons why', the particular point at issue is correct".[671] To illustrate *Kuenzler* uses the following table, in which the horizontal dimension represents subconscious reasoning processes of 'seeing that', the vertical dimension the

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[667] Kuenzler (2017: 90).

[668] Kuenzler (2017: 88) with reference to Ariely *et al.* (2003); Ariely *et al.* (2006); Camerer and Loewenstein (2003); Lichtenstein and Slovic (2006). These findings go back to the classic experiments of Tversky and Kahneman (1974).

[669] Kuenzler (2017: 92)

[670] Kuenzler (2017: 91-92) with reference to Akerlof and Shiller (2015: 45-59); Aldred (2008: 277); Hanson and Kysar (1998: 1420); id. (1999: 639). Kuenzler applies the findings from cognitive behavioral research more generally to dilution laws and the protection of subconscious appeal of a product, not to RPM specifically and argues as follows:

> "Though the ever-increasing emergence and protection of new and more exclusive products, products categories or brand may serve to benefit improved consumer experience, coherent arbitrariness suggests that this emergence may also be a seller's purposeful strategy to lure consumers to new anchors. … …. … … While dilution laws seemingly protect a product's subconscious appeal in an attempt to prevent harmful free riding on the high quality and reputation of goods, strong initial anchors can help product manufacturers reframe a market in order to win market share and make consumer experiences feel different, so that consumers will no longer use other informational cues as grounds for their decisions."

[671] Kuenzler (2017: 97) with reference to Margolis (1987: 69, 80-81).

conscious reasoning process of 'reasoning that' based on information on the objective attributes of the physical good.

Table 2:

		Subconscious (intuitive) system decides for:	
		Good A	Good B
Conscious (deliberative) system decides for:	Good A	Cognitive state 1	Cognitive state 2
	Good B	Cognitive state 3	Cognitive state 4

Source: Kuenzler (2017: 97) (modified)

Applying *Kuenzler's* interpretation of *Margolis* to the explanation for how RPM is used to 'bias' the consumer's decision the following can be argued:[672] Based on the high-price level the consumer can intuitively 'see that' the RPM-bound high-priced good is valuable (= of high perceived quality); the consumer thus is in the upper-left corner (Cognitive state 1) of the figure. If the consumer then is given arguments ("through the provision of statistical data or the type of information that consumer reports examine"[673]) why good B is more valuable or why good A's true quality is lower she is 'reasoning her way downward' into Cognitive state 3 of the figure, based on conscious deliberation she can only move along the vertical axis. In the lower-left corner the consumer still feels (intuitively) that good A is superior (= of high perceived quality). The provision of information to the consumer about the quality of the product might then only lead the consumer to search for 'reasons why' she initially chose the higher-priced

[672] The application to RPM is based on Kuenzler (2017: 97-98).
[673] Kuenzler (2017: 98).

good A, but it will not let her switch to the lower-priced good B as long as she cannot subconsciously 'see that' lower-priced good B is of the same or superior quality compared to good A.

These insights make *Grimes'* more general claim that RPM is used to skew the consumer decision process more plausible and provide a firm basis, though it must be kept in mind that in *Grimes'* explanation the consumer is misled not through the price, but through misleading promotional efforts by the dealer.[674] *Grimes* did not use cognitive psychological research to support his claim, but argues similar when he finds that "[i]f the product promoted by the dealer is competitively inferior (based on quality and price) to rival products but still performs satisfactorily, the consumer may never realize that competitively superior options were available"[675]. As an example *Grimes* points to RPM used by car wax manufacturer Classic, which he argues illustrates "the difficulty consumers have in learning of their buying mistakes and rectifying them"[676]; that Consumer Reports pointed to Classic car wax's less-than-maximum durability and high price compared to alternatives that produced an equivalent but more durable shine, but consumers nevertheless kept buying the car wax and the company pointed to RPM as reason for its success is interpreted by *Grimes* to mean that consumers were led (by misleading RPM-induced services in *Grimes* version) to buy a product inferior to much lower priced market alternatives[677].

2. Why retailer pricing differs from manufacturers pricing

Like all RPM models it must be explained why RPM is necessary and dealers would not choose the same prices, even though the desired price level increases demand. Here, to be able to create a strong initial anchor, retail prices must be set uniformly. RPM is necessary because of the same incentive conflict described in the other price-based models; only the supplier takes into account overall demand, which is increased through a uniform-price level that sets a strong

[674] Grimes seems to be holding on to view that it is dealer services that mislead the consumer, which has been refuted in chapter 3; there is no explicit shift from a services to price in his work. Nevertheless, at one place Grimes, when noting that "[t]he product marketed as a premium offering may or may not be superior to rival products", considers that an additional issue is raised, namely whether "the RPM [is] a device for maintaining higher prices that falsely signal a high quality product?" (Grimes 2010: 125-126).
[675] Grimes (1995: 107).
[676] Grimes (1992: 840).
[677] Grimes (1992: 840); id. (1992a: 1308).

signal of high (perceived) quality; retailers have an incentive to divert sales and to free ride on the overall high price level upheld by the other retailers. RPM protects here the strong signal of high (perceived) quality against 'dilution' through diverging retail prices.

3. Predicted effects on welfare

As the model leaves behind the main assumptions of welfare economics a prediction of welfare effects appears difficult. Correspondingly, *Kuenzler* is cautious and does not make an explicit claim regarding the effects on welfare when RPM is used to bias consumer decisions; *Grimes* on the other hand explicitly speaks of a decrease in consumer welfare. Both emphasize that RPM here results in a consumer choice that the consumer would not have made absent RPM entering the difficult territory of hypothetical choice theory assuming that revealed preferences do not match the consumer's true preferences, if RPM is used as an initial anchor to bias the consumer's decision.

Grimes predicts a "decrease [in] *consumer welfare* whenever [RPM] leads a consumer to make a less competitive purchase than he or she would make absent the promotion"[678]. He also speaks of "decreas[ing] *consumer demand quality* if [RPM] leads consumers away from choices that the informed consumer would make"[679]. With regard to the concept of the quality of consumer demand *Grimes* explains that it "refer[s] to the consumer's ability to make purchases consistently with perfection competition", which requires perfect information.[680] He also speaks of "*consumer injury* from diverted brand choices"[681] and "[i]njury from exploitation of consumer information gaps"[682], which he finds difficult to measure[683]. *Grimes* considers suppliers in these cases to have market power independent of market shares that measure horizontal market power; he speaks of a "behavioral indication of market power" where "a vertical restraint [is used] in a manner likely to exploit consumer information gaps"[684].

[678] Grimes (1992a: 1306), emphasis added.
[679] Grimes (1992a: 1306), emphasis added.
[680] Grimes (1992: 823-4).
[681] Grimes (1992a: 1308), emphasis added.
[682] Grimes (1995: 107).
[683] Grimes (1992a: 1308). Similar Grimes (2006: 890) speaking of the "power that derives in whole or in part from the buyer's informational deficiencies" and id. (1992: 120) arguing in his service-based version of the bias model that "if the restraint is likely to skew allocation by exploiting consumer information gaps, it will create an instant, on-site market power for its brand and pressure for rivals to emulate it".
[684] Grimes (1995: 119).

Kuenzler, who constructs a more general argument on the importance of intrabrand competition, makes no explicit claim regarding the effects on welfare when RPM is used to bias consumers. But, similar to *Grimes*, he argues that "[i]f [] consumer choices are the result of random initial anchors … such as a high price … the choices and trades consumers make are not necessarily going to be an accurate reflection of the pleasure or utility consumers might derive from such a purchase" thus implicitly questioning the accuracy of the output/profitability test for the prediction of welfare effects.[685] He also uses the term "market failure" in this context finding that ""market failures" can arise not simply external to consumers but also often manifest within the consumers' mind"[686]. *Kuenzler* is not so much interested in the prediction of welfare effects, i.e. a market result, but constructs a more general account concluding from the finding that suppliers are able to take advantage of individuals' psychological weaknesses that consumers' actual decision-making processes need to be considered by legal policy makers; he thus proposes to put the focus on the protection of intrabrand competition as "debiasing mechanism"[687] and considers that the ability of a supplier to bias decisions would lead "distortions in the unobstructed working of the *competitive process* as such"[688] that need to be prevented.

B. Analysis

1. Relationship to the Inderst model

Like in the Inderst model, also in the consumer bias explanation a high price is identified by the consumer with high quality. But in contrast to the Inderst model, in this model high (perceived) quality does not coincide with high (true) quality. The reason for this is that

[685] Kuenzler (2017: 99-100).
[686] Kuenzler (2017a: xxix).
[687] On intrabrand competition as "debiasing mechanism" see Kuenzler (2017: 100).
Regarding Kuenzler's more general claims see for example:
Kuenzler (2017a: xiii) arguing "that the erosion of consumer sovereignty through the ability of product manufacturers and sellers to systematically take advantage of individuals' psychological weaknesses demands a twenty-first-century reconceptualization of the consumer and a modern account of how the law should regulate markets";
Kuenzler (2017a: xxviii) arguing that "[i]f there is a legitimate interest in having consumers become aware of the functional superiority of generic substitutes that the market offers, then subconscious decision-making processes have to enter into the calculation of how markets effectively deliver that information" finding that "[l]eaving unspecified consumers' actual decision-making processes blinds policy makers to the important ways in which legal and economic analyses may concern themselves with aspects of innovation and economic growth that lie outside the purview of current market regulatory approaches".
[688] Kuenzler (2017: 94).

consumers in this explanation are assumed to be boundedly rational; their choices are considered the result of the random initial anchor set by the supplier through the RPM-induced high price level and thus do not accurately reflect the utility the consumer derives from the purchase.[689] The model thus is able to give an explanation for why a supplier would want to use RPM, even though price is not necessary as a tool of conveying information to consumers. That the supplier wants to use price as quality signal, even though not necessary to prevent a "market for lemons", is in the consumer bias model that the uniform price level enables the supplier to influence consumer preferences, to anchor the consumer's evaluation of the product leading the consumer to a biased purchase decision. The consumer is also not able to correct the mistaken expression of her revealed preference, as the evaluation based on the initial anchor cannot be corrected and the consumer remains in the cognitive state in which she still "sees that" the quality is high and, when presented with facts to the contrary, only searches for reasons why the initial estimation has been accurate.[690]

2. Relationship to the price as utility model

The consumer bias explanation explains the same situation as the price as utility models, namely that where perceived and true quality of the (physical) product does not necessarily coincide anymore, i.e. the cases in which the Inderst model is not applicable as its conditions are not satisfied. The difference is as follows. In the price as utility model the consumer preference for the good is explained by the intangible product component (in form of a status signal or prestigious image), from which the consumer is said to derive utility; the consumer's willingness-to-pay is taken to mean that the consumer derives utility from the high price, even if the prestigious image/the status signal is attached to a product that is not of premium quality. In contrast, in the consumer bias-explanation the consumer's revealed preference for the good is considered not an accurate reflection of the consumer's true preference. It is assumed that, if the consumer were rational and not biased through the setting of the strong initial anchor, the consumer would have made a different purchase decision. Used as measure for the utility of the consumer is not the actual (subjective) preference, but the preference the consumer would have

[689] Kuenzler (2017: 100).
[690] On this above IV.A.1.

shown had she been able to make a rational decision; i.e. the focus is shifted from actual to hypothetical choice,[691] which is "uncharted territory in the area of competition"[692].

C. Apparent likelihood of the model's condition that consumers are bounded rational

The most important assumption of the model is that consumers are not rational but can be led to make biased decisions that do not reflect their true preferences. This divergence of welfare economics' basic assumption that consumers are rational decision-makers is supported by the use of behavioral economics. As the use of behavioral economics as basis for the formulation of legal policy (and policy formulation is ultimately why we look at the welfare effects of RPM) has been criticized, we first take a look at this critique before further investigating the apparent likelihood that the model's conditions are satisfied in real world markets.

1. Behavioral economics as basis for antitrust policy?

(a) The general concerns of *Wright* and *Stone*

Behavioral economics in general, which "encompasses a multitude of theories that share a common focus on documenting and analyzing systematic deviations from rationality in decision-making"[693], has often been criticized for not being based on robust empirical findings; correspondingly even more critique is directed towards the use of behavioral economics as basis for antitrust policy. *Wright* and *Stone* for example heftily criticize calls to expand what they term "behavioral law and economics"[694] into the area of antitrust as undertaken for example by *Rosch* or *Stucke*.[695] They assert that "[p]roponents of behaviorally informed antitrust policy

[691] This is connected to "hypothetical revealed preference theory", which "defines an agent's preferences in terms of what she would choose if she were able to choose, thus switching from actual to hypothetical choice" (Lianos (2015: 151)). See also Thaler and Sunstein (2003).
[692] Lianos (2015: 159).
[693] Wright and Stone 2012: 1529.
[694] Wright and Stone (2012: 1529) define "behavioral law and economics" as "both general and specific policy proposals designed to shape legal doctrine in [different] areas of law".
[695] Wright and Stone (2012: 1529) target their critique at Rosch (2010) and Stucke (2007; 2009).
Also Tor and Rinner (2011) use behavioral economics for antitrust policy formulation arguing that real-world, boundedly rational manufacturers often erroneously adopt (inefficient) RPM and that as a consequence the dealer cartel model may be more frequently applicable than the rational model make us believe, as boundedly rational manufacturers, who tend to overuse RPM, are less likely to refuse the dealers' request for RPM.
See also already Steiner (1982: 12) arguing that manufacturers mistakenly employ RPM that is not profit-maximizing, or, more specifically, retain an initially efficient RPM scheme "past the time that [it] seemed to serve the firm's profit maximizing purpose" due to "marketing inertia".

claim that behavioral economics provides a superior understanding of both firm and consumer behavior" finding that "this is an empirical claim" and that "[a]ccordingly, the burden of proof for demonstrating this greater understanding remains upon behavioralist advocates"[696]. *Wright* and *Stone* find that proponents of behavioralism in antitrust are failing in this respect because they demonstrate a "pattern of relying on anecdotal evidence to underpin an exceptionally broad thesis, while simultaneously rejecting broad swaths of economic theory and existing empirical evidence"[697]. Suspicious they find in particular that behavioralist accounts always lead to calls for more intervention, not less, seemingly favoring paternalism.[698] And it must be admitted that this is also where the 'consumer bias' model would lead us, though it is argued below that *Wright* and *Stone's* very general critique does not apply to this narrow application of behavioral economics.

Wright and *Stone* argue that the behavioralists' "evidence fails to provide … either necessary or sufficient conditions for situations in which those biases may affect individual or firm decision-making and those situations in which they do not"[699] finding that "[b]ehavioralists have yet to advance a hypothesis as to whether and to what extent an individual or collection of individuals (such as a firm) will demonstrate any purported irrational bias"[700]. They conclude that "[i]n the absence of such a theory, the slate of behavioralist suggestions must necessarily apply either to entire populations by default or to individual firms as selected by regulators"[701] and find that behavioral economics cannot be implemented into antitrust as long there is "[no] meaningful basis on which to discern when specific individuals or firms behave subject to a cognitive bias, as opposed to rationally"[702] arguing that "the passage to successful incorporation into modern antitrust analysis appears … entirely blocked by the failure to generate testable implications of policy relevance"[703]. *Wright* and *Stone's* verdict is clear, behavioral economics

[696] Wright and Stone (2012: 1522).
[697] Wright and Stone (2012: 1521).
[698] Wright and Stone (2012: Fn. 34) noting that "[they] are unaware of any applications of behavioral economics to antitrust favoring less intervention despite the nonobviousness of that result", which they argue "follows the more general trend in the behavioral literature of favoring paternalistic intervention" noting with reference to Rachlinski (2003: 1166) that cognitive psychology when used in law always supports institutional constraint on individual choice.
[699] Wright and Stone (2012: 1522) with reference Mitchel (2005).
[700] Wright and Stone (2012: 1534).
[701] Wright and Stone (2012: 1534).
[702] Wright and Stone (2012: 1534).
[703] Wright and Stone (2012: 1551-2).

is "of little if any utility" for the law and it is highly unlikely, even in the long run, that any area of law will be viewed through the lens of behavioral law and economics[704].

(b) Behavioral law and economics in a specific model

The argument made here is that this general critique on the empirical underpinnings of behavioral economics may not apply to how behavioral economics is used here, as it is merely used to support a specific model that can be tested against competing hypotheses. The consumer bias model generates a clearly identifiable and narrow hypothesis, namely that the use of RPM in many instances can be explained by RPM being used to bias consumer decisions. The critical piece of evidence is that RPM is used by suppliers and that in addition the alternative explanations of RPM do not apply to the situation. The hypothesis of the 'consumer bias' model competes with the alternative explanations of RPM discussed in this chapter. In particular, where RPM is used by (brand) manufacturers with low market shares in markets that are not prone to collusion due to the goods being highly differentiated and thus the main negative models of collusion and exclusion do not apply, the consumer bias explanation competes with the price as quality signal and price as utility model. If there is no informational market failure, it only competes with price model 2. Even *Wright* and *Stone* concede that behavioral economics may be a useful tool where it "generates useful insights about consumer behavior in product markets"[705] – the analysis of the competing hypotheses of the three price models examined in this chapter suggests that possibly this could be exactly such an instance.

2. The apparent likelihood of the consumer bias model

As follows from the considerations above, the question is not whether it is more probable that consumers are rational or bounded rational in general, but whether this is the case in the very specific situation that is described by the three competing models discussed in this chapter, namely when RPM is initiated by a non-dominant supplier on a consumer good market in order to create the perception of high quality. Even more specifically, when no informational market failure can be found, the question is whether price model 2 or price model 3 provide the more accurate description of RPM. Does the consumer value the high price as independent product component or is she merely being misled about the high quality of the good? While this will for each individual ("luxury") product category be extremely difficult to answer, there is one

[704] Wright and Stone (2012: 1551-2) citing Ginsburg and Moore (2010: 98).
[705] Wright and Stone (2012: 1549).

argument, we have encountered above, that may make it more probable that consumers link the high price to the intrinsic quality of the product: The overwhelming evidence, which is the basis of price model 1, that price is perceived by consumers to reflect quality, which is explained by consumers anticipating/believing "that price is determined by the competitive interplay of the rational forces of supply and demand", that prices "are what they are because others found them reasonable and justified"[706]. This makes it difficult to imagine that there are many product categories in which this strong link is broken apart; often the motives of the consumer will be intermingled and co-exist so that it may be empirically impossible to know whether the consumer truly values the artificial image or is merely being misled as to the intrinsic quality of the product.

In chapter 5 we will have to come back to these considerations.

[706] Inderst (2013: 13, Fn. 27) and Inderst and Maier-Rigaud (2015: 6) cite Scitovszky (1944: 100-101).

V. Conclusion: Welcome price-based models!

The contribution chapter 4 makes to the EU debate is that it offers alternative models that could fill the gap that results from the rejection of the service-based models in chapter 2 and 3. The argument is that these models describe the RPM cases that are crucial for the RPM debate, as they concern the cases, in which the economic consensus considers RPM welfare-enhancing, because the elimination of intrabrand competition is outweighed by the enhancement of interbrand competition.

The thesis thus proposes to move the debate from the service- to the price-based models. It starts the necessary discussion of the price-based models by making in particular the following points.

1.

Chapter 4 clarifies and stresses how closely related the price-based models are to the service-based models, on which the focus of debate has for so long been. It is really just a small shift that is necessary to move the RPM debate towards the right place. The shift from service- to price-based models that is proposed in this thesis is illustrated in table 1 above.[707]

2.

The chapter stresses that, by moving the focus from the service- to the price-based models, we are moving into the area of markets based on the emotional/image component of products and of consumer preference formation. As long as the focus was kept on dealer services the discussion stayed safely in the area of markets for tangible goods, in which the output/profitability test of welfare economics including the assumption of stable preferences works just fine, the prediction of welfare effects in the service-based models was unproblematic. The economic consensus' assumption that producer and consumers interests are aligned and that thus the enhancement of interbrand competition could justify the elimination of intrabrand competition through RPM was well-grounded. But if we look at the price-based models, there are doubts, whether this assumption can be kept, in particular in the absence of an informational market failure.

[707] See above section III.B.2.

3.

The chapter shows that two situations can be distinguished:

If there is an informational market failure (and also the other conditions of price model 1 are fulfilled), the situation is clear: Price model 1 applies and positive welfare effects can be predicted to result from the use of RPM by a non-dominant supplier of consumer goods. In this case the true intrinsic quality of the product matches the perceived quality created through the artificial price. Legal implications will be straightforward.[708]

If there is no informational market failure, which – as argued in this chapter will be more often the case – the situation becomes difficult. RPM is then used to either create a valued image component of the product or to bias the consumer decision. Which of the two is the case then largely depends on whether the consumer is rational or not, whether she truly values the high price image independent from the product's intrinsic quality or is merely being misled. The analysis has shown that this is an empirical question that will difficult to determine, in particular due the fact that price is connected by consumers with the intrinsic quality of the product so that it is difficult to validate where this link can be considered to not exist anymore. In addition there are general doubts on the accurateness of the price as utility model – in particular as there is no market failure – which will have to be followed up in the next chapter.

Important to note here is that the shift to the price-based models, in particular in the absence of an informational market failure, appears to be crucial for the economic and, thus, ultimately also for the legal assessment of RPM, as with price model 3 there is an explanation for the use of RPM where consumer and producer interest are not aligned and the increase in profits/demand cannot be equated with an increase in welfare.

4.

The chapter also confirms that the economic consensus has been right in considering the Klein model the most important model of the service-based models and shows the relevance of Grimes' critique on that model. What makes the Klein model irrelevant is that it focuses on service provision, which is unlikely to be consistent with reality; but with a small change – from

[708] On this see below chapter 5.

service to price itself – we arrive at the truly important issues with regard to RPM, in particular the issue of how its welfare effects can be evaluated when through the elimination of intrabrand the consumer decision making process is influenced by brand manufacturers with low market shares, which is what *Grimes'* critique was focused on.

5.

While it would be easy to now point merely to the need to further economic research (this could be done in an economics thesis), the thesis needs to further investigate the above raised issues and broaden the perspective, as it is concerned with the legal and policy implications that can be drawn from the economics of RPM. This will be done in chapter 5.

Chapter 5: The price-based RPM models – basis for a theory of harm?

I. Introduction

Chapter 4 has examined three price-based explanations for the use of RPM, which all three in general describe the use of RPM in the same type of cases, namely where RPM is used by branded (or more general consumer) good manufacturers with low market shares for products that are considered to be of high quality. It has been shown that in terms of the prediction of welfare effects the models do not provide consistent predictions, unless an information market failure exists and price model 1 applies, which will be rarely, if ever, the case. This at the same time means that the claim of the economic consensus that RPM is most often benign because it is used to enhance interbrand competition and producer and consumer interests are aligned does not stand on firm grounds anymore, once the service-based models are rejected (on empirical grounds) and replaced by the corresponding price-based models. Rather, by moving from the service- to price-based models, there is now the possibility for the argument that the elimination of intrabrand price competition is, even though desired by the supplier because it can enhance its position on the interbrand level, not necessarily positive in terms of welfare. This possibility comes in particular in form of price model 3, in which RPM is used to bias or mislead the consumer and which competes with the price as utility model (price model 2) in the cases, in which there is no informational market failure. What is problematic is that – as shown in the previous chapter – it is very difficult to determine, which of the two models applies. In addition, there are concerns with regard to the accurateness of price model 2, as it – in particular due to the possibility to substitute the desired artificial with natural scarcity – predicts positive welfare effects in a case, in which no market failure exists. While within the internal economic discourse, one may point to the need for further, possibly empirical, research, the law needs to have an answer now as to what to do with RPM.

Chapter 5, thus, will further explore the three price-based models with the aim to arrive at implications for the legal treatment of RPM by broadening the perspective, in particular by adding for example economic findings from other economic sub-discourses, but also by further investigating the relative probabilities of the price models and the supposed positive effects of price model 2.

II. Methodology

This endeavor can be justified by the following methodological considerations that concern the translation of economic findings into law and that explain the broadening of the perspective and, in particular, show why, in addition to the considerations of the welfare effects of RPM, other considerations have room in the decision of the policy-maker, the main reason being that law does not need to adopt the internal perspective of a particular sub-discourse in economics, but can look from outside the system of economics to pick the most consistent explanations of RPM that can aid in formulating the legal policy of RPM.

Law is not economics, thus the economic insights of chapter 4 must be "translated"[709] into the law and in this process may be supplemented by other considerations.

While we have dived into the economic discourse in the previous chapters following its internal dialogue, in particular the specific sub-discourse of welfare economics that focuses on the prediction of welfare effects, this chapter follows up on these findings with the aim to draw legal implications from the uncertain findings concluded above. Economics is a scientific discourse, its aim and social function is to increase the knowledge about the world; its main activities being description and prediction, it asks questions that can be answered by producing theoretical models that can be empirically tested with the purpose to develop ever more accurate models of economic reality,[710] which are thus "subject to perpetual revision"[711]. Law, in this case here EU competition law, is concerned with an entirely different project, it prescribes what firms ought / ought not to do on the market deciding which economic behavior is legal/illegal on the market, in our case dealing with the issue of whether or in which cases RPM should be legal/illegal and incorporating this choice through legal authorities that are faced with the difficult task of deciding despite existing uncertainty. Confronted with the issue of the legality of RPM the law must at any time be able to have "an ultimate, in the sense of persuasive, explanation, in terms of legitimate exercise of authority"[712], a court or a competition agency

[709] Already Böhm (1933/1964) uses this term when speaking of the interaction of law and economics in the field of competition law.
Also Lianos (2009: 349) (analyzing "the emergence of economic transplants, that is, economic concepts that are 'translated' into the legal system at the doctrinal stage", claiming "that the paradigm of translation is the most adequate explanatory framework for taking into account the dual nature of economic transplants in envisioning the interpretative strategy that should be employed").
[710] Cf. Popper (2002) (a theory must be empirically falsifiable to be scientific).
[711] US Supreme Court, *Daubert v Merrell Dow Pharmaceuticals,* 509 US 579, 597 (1993).
[712] Lianos (2009: 363).

cannot delay making a decision in order to wait for a more accurate answer from the science relevant to its case, but must decide the case before it.[713] In order to understand the economic behavior, which the law norms, it looks to the science of economics picking insights from the economic discourse that are relevant for its project. The law can and must consider the limitations of the insights economics offers, it also can and must take into account that the questions answered in economics are not necessarily the same or at least not the only asked and relevant in the law; the law can also adopt a broader perspective and must not confine itself to using the economic insights of a particular sub-discourse within economics,[714] in particular is the exclusive focus on the prediction of welfare effects not necessarily the focus the law must choose.

III. Possible considerations to be added

In view of the aim to determine the legal implications of the price-based models the following considerations can be added to the analysis of the price-based models.

A. The empirical limits of predicting welfare effects

The empirical difficulties encountered in the analysis of the price-based models in chapter 4 point us to the importance of letting go of the idea that consequentialism, here in form of economic models that predict welfare effects and that are tested against and confirmed by empirical evidence, will give the policy-maker a straight answer as to how to deal with RPM. The price-based models clearly show the limits of consequentialism, in particular the question

[713] Mestmäcker (1964: 115) („Der Richter muß jeden ihm unterbreiteten Fall entscheiden, ohne unter Berufung auf den Erkenntnisstand der für ihn erheblichen Wissenschaften sein Urteil aussetzen zu können."). Similar US Supreme Court, *Daubert v Merrell Dow Pharmaceuticals,* 509 US 579, 597 (1993) (as cited by Lianos 2009, 363).: „Scientific conclusions are subject to perpetual revision. Law, on the other hand, must resolve disputes finally and quickly … We recognize that in practice, a gatekeeping for the judge, no matter how flexible, inevitably on occasion will prevent the jury from learning of authentic insights and innovations. That, nevertheless, is the balance that is struck by Rules of Evidence designed not for the exhaustive search for cosmic understanding but for the particularized resolution of legal disputes."

[714] One can think of law and economics as two operationally autonomous, autopoietic subsystems of society (in the sense of *Luhmann*), which each follows a different internal code; the system "law" is receptive to the external "noise" of the system "economics", but it is the law's internal structure, criteria and categories that decide "whether and to what extent that "noise" may be processed as information" (Baxter 2006), it is the law that "enslaves" (Teubner 1996: 911, 912, 913, 914, 917) and reconstructs into its language the economic discourse.

of welfare effects in image-led markets or of naturally versus artificially scarce products or the difficulty of distinguishing price model 2 and price model 3. Only the price as quality signal model is based on firm grounds in its prediction of positive welfare effects, but it applies only in a very limited number of cases as it requires an information asymmetry. Nevertheless, the price as utility and the consumer bias model are plausible explanations that can explain instances of RPM that do not fall under the price as quality signal model for lack of an information asymmetry. It would be dangerous to insist here that the legal decision maker must choose the "best available" economic model in terms of predicting welfare effects. It cannot be pretended that the price as quality signal model covers many cases as economists may like to insist for lack of alternative explanations, when the consistency of the model with what is actually happening on most real world (branded good) markets is doubtful. It can also not be pretended that the welfare effects predicted in the price as utility are on firm grounds, as welfare economics is not geared to examine image-led markets. Within the economic discourse, which is concerned with the prediction of welfare effects and whose purpose it is to develop ever more accurate models, the price as quality signal model may be considered the "best available" model that can accurately predict welfare effects and economics then can simply point to the need for more research. Similarly, economics can also consider the price as utility models the "best" model for predicting welfare effects in image-led markets and claim the need for more research for the prediction of welfare effects in image-led markets. But the law must have a solution for now, it cannot point to the need for more economic research; and as it is not necessarily confined to only look at the particular economic sub-discourse that focuses on the prediction of welfare effects, it can turn to different economic discourses that approach competition from a different angle and can supplement the inconclusive prediction of welfare effects. The reason why there is no "better" model that could predict welfare effects lies in the current inability of welfare-predicting models to deal with the demand for the intangible component of a branded good and to consider hypothetical choices and biased decisions (or the formation of consumer preferences in general). It thus may be important to understand competition not only in terms of its effects on welfare, i.e. in terms of market results, but also to think about competition from different angles that could help the legal decision maker to make a decision on the policy towards RPM. This is also important because the exclusive focus on welfare effects leads to potentially

unsolvable empirical questions as for the example the issue of the efficiency and welfare effects of artificially versus naturally scarce high prestige goods.[715]

B. Competition as 'discovery procedure' and the assumption that unrestricted competition equals optimal welfare

From the fact that we have just encountered the limits of the research and methodology behind the scientific endeavor of directly predicting the welfare effects of RPM it is just a small step to the work of *Hayek*, in which it is assumed that from a theoretical perspective competition, which is the basis for any market economy, cannot be measured, as it needs to be understood as discovery procedure.[716] In a sense the methodological limits of predicting welfare effects encountered are an example for and support the insights of *Hayek* who warned about the "pretence of knowledge" regarding the "complex phenomenon" of competition.[717]

The reason why competition needs to be understood as such discovery procedure is that competition is valuable because of this very discovery function. The decision for a market economy versus social planning is made because the market economy as a spontaneous order has the advantage over social planning that it is able to solve the problem of private, dispersed knowledge namely through competition as "a procedure for the discovery of such facts as, without resort to it, would not be known to anyone, or at least would not be utilized"[718]. The market economy which is based on competition is thus able to utilize more knowledge than any person or organization (in what *Hayek* terms a planned *economy proper*) could ever have,[719] because it utilizes the knowledge of *all its members*, while "only the *knowledge of the organizer* can enter into the design of the economy proper"[720]. Competition, understood as spontaneous

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[715] On this see above chapter 4 III.C.2.(c) and below IV.B.1.(b).
[716] Hayek (1978).
For a short overview over "competition as discovery procedure" cf. Mestmäcker and Schweitzer (2014: 90-92, §3 para. 70-76).
[717] *Hayek* describes competition and the market as complex phenomena, which he defines as "structures of essential complexity, i.e. [] structures whose characteristic properties can be exhibited only by models made up of relatively large numbers of variables" and with which the "social sciences, like much of biology but unlike most fields of the physical sciences, have to deal" (Hayek 1978: 26). The complexity increases „as we proceed from the inanimate to the ('more highly organized') animate and social phenomena" (Hayek (1964/ 1967: 26)). With *Hayek's* finding that social phenomena like competition and the market are complex phenomena connected is *Hayek's* rejection of the "pretence of knowledge", of which he accuses socialism; *Hayek* "… prefer[s] true but imperfect knowledge, even if it leaves much indetermined and unpredictable, to a pretence of exact knowledge that is likely to be false" Hayek (1978a: 29).
[718] Hayek (1978: 179).
[719] Hayek (1969: 169).
[720] Hayek (1978: 183).

order and procedure to discover unknown facts, is "a communications system ... which turns out to be a more efficient mechanism for digesting dispersed information than any that man has deliberately designed"[721]. But if "competition [as a discovery procedure] is valuable *only* because, and so far as, its results are unpredictable and on the whole different from those which anyone has, or could have, deliberately aimed at"[722] then its effectiveness cannot be measured by looking at the results, because "[i]f we do not know the facts we hope to discover by means of competition, we can never ascertain how effective it has been in discovering those facts that might be discovered." [723] Thus "[t]he necessary consequence of the reason why we use competition is that, in those cases in which it is interesting, the validity of the theory can never be tested empirically" by measuring its performance in terms of market results[724]. In *Hayek's* concept "particular results the market will achieve" cannot be predicted, but only "the kind of pattern, or the abstract character of the order that will form itself"[725]. The missing measurability of the results (or the success) of competition, which is not only the consequence of competition being a procedure to discover unknown facts, but also of markets based on competition being a spontaneous, purposeless order, makes such an approach to competition vulnerable, and already *Hayek* recognized this as an "intellectual difficult[y] which worr[ies] not only socialists"[726] – because how can "we claim that the market order produces in some sense a maximum or optimum", if "it is not possible to express the value of the results as a sum of its particular individual products"[727]? *Hayek* points out that while "the common welfare … of a free society can … never be defined as a sum of known particular results to be achieved, [it can be defined] as an abstract order which as a whole is not oriented on any particular concrete ends but provides merely the best chance for any member selected at random successfully to use his knowledge for his purposes.[728]" In other words "[t]he so-called 'maximum' [achieved through competition on a market]… can[] be defined … only in terms of the chances it offers to unknown people to get as large a real equivalent as possible for their relative shares" [729]. Competition, thus, is for *Hayek* aimed at maximizing the individual's chance to make profits, which is very similar to *Böhm's* notion of protecting the "legal chance for profits"[730]. This is

[721] Hayek (1978a: 34).
[722] Hayek (1978: 180). (Hayek's accentuation).
[723] Hayek (1978: 180).
[724] Hayek (1978: 179-180).
[725] Hayek (1978: 181).
[726] Hayek (1978: 183).
[727] Hayek (1978: 183).
[728] Hayek (1966/1967: 163 12.).
[729] Hayek (1978: 179, 186).
[730] Böhm (1933/1964: 288).

also why unrestricted competition based on the freedom to compete is found to equal the optimum in terms of market results, put differently, the market participants' freedom to compete cannot conflict with the optimal market results,[731] at least unless there is an identifiable market failure.

If a welfare economics model has difficulties predicting the welfare effects of a business practice, it must be considered, whether the assumption that – at least unless there is an identified market failure – unrestricted competition leads to the optimal market result, does not provide the more accurate prediction in the particular scenario.

C. The role of price as informational tool in the market economy

In addition to the basic premise described above, what can also aid in the analysis of the price-based welfare models is the role price is ascribed to in the market economy, if competition is seen as discovery procedure.

As explained above, *Hayek* considers competition to be valuable because it is able to solve the problem of private, dispersed knowledge. Importantly, the market does so through the price mechanism, i.e. with the help of the price. "Utilisation of knowledge widely dispersed in a society with extensive division of labour cannot rest on individuals knowing all the particular uses to which well-known things in their individual environment might be put. Prices direct their attention to what is worth finding out about market offers for various things and services."[732] Prices, regulated by "negative feedback", enable the market to achieve two things: First, "to bring about a mutual adjustment of plans", which means that "the expectations of transactions to be effected with other members of society, on which the plans of all the several economic subjects are based, can be mostly realised", and, second to secure "that whatever is being produced will be produced by people who can do so more cheaply than (or at least as cheaply as) anybody who does not produce it (and cannot devote his energies to produce something else comparatively even more cheaply), and that each product is sold at a price lower than that at which anybody who in fact does not produce it could supply it."[733] "The knowledge consists rather of a capacity to find out particular circumstances, which becomes effective only

[731] This is based on *Hoppmann's* non-dilemma arguments, see Hoppmann (1966: 289).
[732] Hayek (1978: 181-182).
[733] Hayek (1978: 184-185)

if possessors of this knowledge are informed by the market which kinds of things or services are wanted, and how urgently they are wanted."[734]

Against this background the effects of RPM as described in the price-based models, namely for the creation of the perception of high quality, are considered.

IV. Revisiting the price-based models

In this section the three price-based models, in which RPM is used to create the perception of high quality as true quality signal, as component of the product or as false quality signal that biases the consumer decision, are considered in view of the role the price plays in the market economy, if competition is understood as discovery procedure. It is also considered whether the basic premise that in general unrestricted competition leads to optimal market results (unless there is market failure) does not provide the more accurate prediction in the specific price-based scenario.

Two scenarios are distinguished based on whether there is an informational market failure, in which case the price as quality signal model may apply, or not, in which case the other two price models may apply.

A. The price as quality signal model

If there is an informational market failure and also the other conditions of price model 1 are satisfied, the evaluation of RPM is straightforward. The considerations above confirm the findings of the previous chapter, as the welfare economics perspective comes to the same conclusion as the perspective that considers the role the price plays in competition: The elimination of intrabrand competition through RPM is not harmful to competition, because interbrand competition is enhanced and a market failure remedied. The prediction of welfare effects in the fully-developed model is straightforward. Also from the perspective of which role the price plays in competition, no different conclusion is reached. The reason why the coordination mechanism in form of price is eliminated is that there is an informational market

[734] Hayek (1978: 181-182)

failure; price, whose meaning in the market economy is anticipated by consumers, is used here to prevent a market for lemons. RPM is needed here because in the cases that fall under the model the price of the good cannot be accurately determined in the free forces of competition because there is a market failure. The price, which is normally horizontally-generated through the market mechanism, must be substituted by an artificially-kept price, because there is no other possibility. The costs of the restriction of intrabrand competition that are incurred by the supplier and the connected negative effects in terms of welfare must be incurred to prevent a market for lemons. That unrestricted intrabrand price competition at the dealer level would lead to the optimal market result cannot be assumed here and does not provide a more accurate prediction, because there is a market failure that can be remedied only through the restriction of competition through RPM.

What needs to be taken into account, when the legal implications of this finding are drawn, is that the analysis above has shown that the conditions of the models will be satisfied only in exceptional circumstances. One must thus be particularly cautious to make sure that suppliers do not use this justification as a pretext to hide other motivations for the use of RPM, which possibly do not lead to positive effects on welfare. As the legal implications will partly depend on the relative probability of all three possible models, we will look at them after a conclusion about the other two possible explanations (price model 2 and 3) is reached.

B. Price as utility or to bias the consumer decision?

If there is no informational market failure, either the price as utility / image model or the consumer bias model may apply. This leads to a difficult situation as the models, at least at first sight, differ with regard to the prediction of welfare effects: While RPM in the price as utility model is said to have positive effects on welfare, RPM in the consumer bias is said to have negative effects. What needs to be further investigated though, are the concerns raised in chapter 4 that concern the accurateness of the price as utility model and, in particular its prediction of positive welfare effects.[735] This will be done in particular in view of the possibility that price may have to be reserved as signal for (intrinsic) quality.

[735] See above chapter 4 III.C.II.

1. The price as utility model in view of the role of price in the market economy

The following considerations attempt to build the argument that due to the impossibility to separate price/ as quality signal from price as utility/product component, it is highly unlikely that the price as utility model accurately describes the use of RPM in the absence of an informational market failure. The model in particular either does not apply, as consumers cannot separate between price as quality signal and as utility and are misled, or it will be impossible to determine with any certainty the cases in which it applies; in addition, even if the model does apply and the consumer can be said to truly value the price as component independent of the product's intrinsic quality, positive effects cannot be assumed, because due to the role price plays in the market mechanism it needs to be reserved as signal for a product's intrinsic quality.

(a) The impossibility to separate price as utility from price as quality signal

It is difficult to imagine that a rational consumer, for whom, as emphasized in the price as quality model,[736] a high price means high quality, truly values the high price as product component, which provides her with an additional value, independent of the product's intrinsic quality. In most – if not all – cases the consumer will value both, the product's high quality combined with the image that results from a high quality product. That the model does not apply for example in case of *Scout school bags* may be easy to justify,[737] but in case of luxury goods it becomes more difficult to distinguish whether consumers buy the good for its tangible qualities or its intangible emotional component and most often both motives will be mixed so that it seems impossible to determine a case in which the high price is not also considered to mean a high (intrinsic) quality of the product.

Consider the case of perfumes or cosmetics – can it really be said that the consumer buys and values the emotional component independent of the inherent quality of the product? If a consumer buys a L'oréal lipstick or Givenchy perfume – does the consumer not have the feeling she is (and expects to be) buying a superior product? This feeling seems to be part of the allure of luxury products.

[736] See above chapter 4 II.A (in particular 1.(c)).
[737] For an analysis of the *Scout school bags* see below IV.B.2. On the assessment of the utility model see below Fn. 771.

While in chapter 4 the strong link between price and quality and the resulting concern with regard to the price as utility model have already been discussed,[738] there are two considerations that can be added to strengthen the view that price as quality signal and price as utility cannot be separated, neither by the consumer in her decision-making process nor by legal decision-makers faced with the question of a possible applicability of the price as utility model.

First. The link between image/price as quality signal and as utility/product component is reflected in (maybe even a result of) how the luxury industry developed, as "[s]uperior product quality represents indeed the foundation upon which the luxury industry built itself"[739]. The focus was on producing high-end and superior-quality luxury products; only with the help of an extensive interpretation of trademark law new business models have been made possible including "pyramidal" luxury, downward brand extension and the extension "to collateral and promotional (luxury) products, catering to a continually growing consumer based of would-be luxury fans"[740]. The reason why these types of business models work is that the luxury producer who originally earned its reputation through manufacturing superior products is given the legal means to transfer this earned high quality perception to other products of lesser quality – a type of IP right is created. For the consumer the perception of high quality remains to be connected to the high quality of the good, even when the perception is merely the result of protecting the originally earned image against information generated by the market; through an extensive trademark law the producers have been enabled to take advantage thereof. The developments in trademark cannot be discussed here,[741] but it can be said that this trend that threatens to make its way into competition needs to be stopped, possibly reversed.

Second. While the idea of the image as product component, which originates in trademark law, has already found its way into the law on selective distribution and justifies the elimination of nonprice intrabrand competition,[742] this again is a reflection of the impossibility to separate

[738] See above chapter 4 III.C.2.(b).
[739] Calboli (2015:31).
[740] Calboli (2015:32).
[741] See for example the similar information-suppressing dynamic in ECJ 18.06.2009, C-487/07, ECLI:EU:C:2009:378 – *L'Oréal Bellure,* which was for this very reason applied only reluctantly by the referring national court (on this see below n. 759) and highly criticized e.g. by Enchelmaier (2010). In *L'Oréal Bellure* the ECJ found that the manufacturers of down-market, low-price imitations of up-market, expensive perfumes byy L'Oréal and other prestige brand could infringe the trademarks of the prestige brand perfumes even in the absence of a likelihood of confusion by describing the imitations with reference to the imitated prestige brand using comparison price lists.
See also below n. 759.
[742] In the recent selective distribution case of *Coty Germany* (ECJ 6.12.2017, C-230/16, ECLI:EU:C:2017:941 – para. 25) the ECJ cites its trademark law decision *Copad* (ECJ 23.4.2009, C-59/08, ECLI:EU:C:2009:260 – *Copad*, para. 24-26) in order to justify its acceptance of the protection of a luxury image as legitimate aim of selective distribution.

image as utility from image as quality signal. While this is not the place to discuss the issue of selective distribution, it can be noted that this development seems to be a mistake, as it lacks a clear economic foundation and has taken place possibly only because also the ECJ – just like the consumer – does not separate image as utility from image as quality signal. The ECJ intermingles in its jurisprudence the two very different economic justifications for restrictions of (intrabrand) competition, namely those that have been discussed in this thesis in the context of RPM as price model 1 and 2, i.e. price/image as quality signal and price/image as utility/component of the product. The court explicitly and repeatedly points to the informational function of the luxury image, but then ends up accepting selective distribution with the aim to protect a luxury image not because and only where it is necessary to remedy an informational market failure, but independent of its informational function, seemingly unaware (at least unclear/unconcise) about what type of economic justification it builds here.[743]

(b) The prediction of welfare effects in the price as utility model

Doubts on the prediction of positive welfare effects in the price as utility model arise not only because the use as quality signal cannot be separated from the use as image component, but also, and more importantly, because there is no market failure for which RPM is used as remedy, as naturally scarce products can satisfy the same demand.

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[743] The root of the ECJ's problematic unconcise argumentation seems lies in *Copad*, para. 24-26, which then was taken over into *Coty Germany,* para. 25.
In *Copad*, para. 25 (and then cited in *Coty Germany*, para. 25) the ECJ points to the informational role of the luxury image arguing that "[s]ince luxury goods are high-class goods [of (intrinsic) high quality], the aura of luxury emanating from them is essential [and needs to be protected] in that it enables consumers to distinguish them from similar goods" concluding that "[t]herefore, an impairment to that aura of luxury is likely to affect the actual quality of those goods" (*Copad*, 25-26; almost identical *Coty Germany*, para. 25). If this stood alone, it could be understood to refer to the price/image as quality signal model. But the ECJ adds to this the notion that "the quality of luxury goods … is not just the result of their material characteristics, but also of the allure and prestigious image which bestows on them an aura of luxury" (*Copad*, para. 24; *Coty*, para. 25) – this points to a very different economic model, namely the price/image as utility model, which is very different from the price/image as quality signal model, as in the first true and perceived quality coincide and an informational market failure is remedied, while in the second an image independent of the intrinsic quality of the good is protected against competition (and shielded from the information that is generated through competition). What is also problematic in the ECJ's reasoning is that (at least in the original passage in Copad, para. 25) it simply assumes that true (intrinsic) and perceived quality (= image) coincides, when it finds that "[[**s]ince luxury goods are high-class goods**, the [luxury image] is essential [as quality signal]". It overlooks that this will be the case only in (and under the conditions of) the image as quality signal model, not where the image is protected as product component independent of an informational market failure, which is a condition which, as we have seen in this thesis in the context of price, may be highly unlikely in the current information environment. Result of this unconcise reasoning is that in selective distribution law the law (the court) must now decide whether the good in question is a luxury good that is awarded image protection against market information or not (cf. how the ECJ distinguishes *Pierre Fabre* (C-439/09, EU:C:2011:649) from *Coty Germany* by arguing that the goods at issue in *Pierre Fabre* are as cosmetic and body hygiene goods (elsewhere prime example of luxury goods) not luxury goods (*Coty Germany*, para. 32).

At first sight this results in the possibly unsolvable empirical question of what is more efficient.[744] But if we add the considerations introduced in this chapter, in particular the role of price in the market economy, it may be argued that it is highly unlikely that RPM in order to create artificial scarcity should lead to positive welfare effects; rather, it may be argued in the market economy markets based on goods that create this perception based on their true quality should be preferred.

Based on the role the price plays in the market economy, it may be possible to argue that price needs to be reserved as information signal about the quality of the product and should not be controlled by suppliers and turned into a component of the product, which the consumer supposedly values. If price becomes a valued component of the product, from which the consumer derives utility, this would mean that the price (as sign, similar to the trademark) becomes an economic object in its own right.[745] Others have argued that this is what is happening in the new economy of signs with the trademark-turned-brand; what is actually being consumed and paid for is the signified, i.e. a particular brand meaning, and not the referent, i.e. the physical good as such.[746] The trademark-turned-brand as a sign in this scenario "is not pure information that is obtainable through some straightforward procedure … [r]ather, it is only decipherable within the context of a language, meaning a system of social belonging – it is a thread in the cultural tapestry", "[e]ach sign has a meaning that belongs to a system of meanings"[747]. But, and this is what makes price so special and distinguishes it from the trademark, price cannot become part of this valued component of a branded product, because the price as a signal has already a pre-determined meaning for consumers in a market economy; this meaning is created in the minds of consumers due to their experience and rational expectations of how the market economy functions. Price needs to be horizontally-generated through the market. If it is turned into a (vertically-controlled) component of the product, it stops working as a signal for the quality of the tangible good. While it may be difficult to determine, whether the consumer truly values the price as product component independent of the product's intrinsic quality, one may argue that intrabrand restrictions of competition cannot be justified in order to enable producer to satisfy such consumer demand through artificially scarce goods, as this would threaten the working of the price mechanism, which requires a strong link between price and intrinsic quality in the minds of the consumer.

[744] On the view that artificially scarce products are efficient see above chapter 4 III.C.2.(c).
[745] Ramello and Silva (2006: 952) with regard to the trademark (as sign).
[746] Ramello and Silva (2006: 952).
[747] Ramello and Silva (2006: 952).

Second, it needs to be taken into account that in case of naturally scarce goods the cost of the elimination of price competition is not incurred. The general reduction of intrabrand competition can be considered harmful, inter alia because not having the valuable discovery procedure described by *Hayek* means that the optimal market result is not reached.[748] If you can have the same type of market, why let the supplier eliminate competition whose value in the market economy is not questioned? Just to make possible artificially scarce goods whose superiority over naturally scarce goods in terms of welfare is uncertain at best?

Third. Markets based on goods that create the same perception of high quality based on their true quality are to be preferred because it is competition (as a discovery procedure) that should decide about whether or not the good is perceived to be of high quality and surrounded by a corresponding image. This is not an argument against competition based on image or the intangible components of the product more generally. The argument is not that consumers should not value such a purely fictional image and better decide based on the quality attributes of the physical product or that image should play no role in the consumer decision. Rather image should be generated horizontally and not be vertically-controlled by the supplier by eliminating competition and thereby suppressing information generated by the market about the product's tangible and intangible components. This argument is grounded in the view that the emotional component of a product needs to be "earned" by the product and that it is not the supplier that decides about the image, but ultimately the market, which generates information on the emotional component. The emotional component of the product, more broadly the brand,[749] is considered here a creation not of the supplier alone, but rather made up by many sources, which may or may not be under the control of the supplier.[750] If the brand is considered from the consumer and market perspective, which is in line with the horizontal focus in the digital age, then the elimination of intrabrand competition must be harmful, because the market mechanism is necessary to create the information on the intangible component of the product.

[748] On this above III.B.
[749] On the definition of brand see chapter 1.
[750] This is contrary to the „product- or producer-centered view of brands, in which goods and information are under corporate control in a one-way-system". Desai (2012: 1007).
For the consumer-centric definition of "brand" see Appleton and Noble (2015: 49).

The creation of a market, on which it is competed based on vertically-controlled images that are legally shielded against the informational function of the market mechanism cannot justify the elimination of price competition[751].

The elimination of price competition comes at a cost to the economy, because it gives up the valuable discovery function. The enhancement of interbrand competition in form of competition based on the perception of high quality created through suppressing information cannot be considered to outweigh this cost, in particular because there is the alternative of competition based on a horizontally-created image and because valuing the intangible good component cannot be separated from valuing the tangible product.

If RPM is used to protect the image component of a product as in the price as utility model, the welfare effects predicted by the model are not plausible. The basic premise that unrestricted competition will lead to the optimal market result (without the need or the possibility to predict the particular result) provides the more plausible answer as to whether the restriction of intrabrand price competition in this specific scenario, in which RPM is used to protect the image component of the product in the absence of an informational market failure, is harmful to competition.

2. The consumer bias model

In light of the above considerations the consumer bias model seems to be the more plausible explanation for the use of RPM in cases, in which an informational market failure does not exist. It describes the situation in which the price as utility model fails to accurately describe RPM and steps in to provide the motivation of the supplier to use RPM.

[751] This argument is similar to that made by Jacob LJ when applying the ECJ's guidance in *L'Oréal Bellure*. In the Court of Appeal decision he pointed out that that the ECJ's *L'Oréal Bellure* "means that poor consumers are the loser … [as] they are denied their right to receive information" and that the only harm to the trademark owner "would be letting the truth out – that it is possible to produce cheap perfumes which smell somewhat like a famous original", which includes to a certain extent "a bit of a message that the price of the real thing may be excessive and that the "luxury image" may be a bit of a delusion" (L'oréal SA, Lancôme perfums et beauté & Cie SNC, Laboratoire Garnier & Cie v Bellure NC, Malaika Investments Ltd, Starion International Ltd [2010] EWCA Civ 535, avialble at http://www.bailii.org/ew/cases/EWCA/Civ/2010/535.html, para. 14-15). He furthermore pointed to the "real danger that important areas of trade will not be open to proper competition", [i]f a trader cannot (when it is truly the case) say: "my goods are the same as Brand X (a famous registered mark) but half the price" (Court of Appeal, para. 16).

Importantly, the consumer bias model describes a situation in which the interests of producers and consumers cannot be considered aligned anymore from the perspective of competition; it thus represent a specific exception to the basic assumption of the economic consensus on RPM that RPM is, in the absence of (horizontal) market power, benign. The benefit gained by the producer in this model, which leads him to adopt RPM, even though it comes at a cost, is that the consumer makes a decision on less information than would be accessible through the market as a communication system. This cannot be considered a strengthening of interbrand competition that could offset the harmful effects of the elimination of intrabrand competition. Thus, even if it is not entirely clear how the welfare effects can be predicted in case of bounded-rational consumers, it can be said that harm to competition results, because the elimination of intrabrand competition on the dealer level can be considered harm to competition. The assumption that unrestricted intrabrand competition leads to the optimal result in terms of welfare provides the more plausible prediction here.

The consumer bias models defines a situation, in which a supplier with low market shares is using RPM in a way that does not enhance interbrand competition, although the supplier is able to enhance its own position. The model thus provides the explanation why a supplier would want to incur the cost of RPM and vertically implement a horizontal restriction of intrabrand competition without this leading to an offsetting enhancement of interbrand competition.

3. Conclusion: RPM is harmful in the absence of an informational market failure

In the absence of an informational market failure RPM is used to create an artificial price that is either used as component of the product or is used to bias the consumer decision. In both alternatives harm to competition and welfare can be assumed. The elimination of price competition, which is harmful unless there is some offsetting benefit in terms of interbrand competition, is not outweighed by the enhancement of interbrand.

In particular (with regard to price model 2), it is not necessary to eliminate intrabrand competition in order to create image-led markets as there is always the possibility to compete on images and perceptions of high quality, which are horizontally-generated by the market mechanism or by consumers, without incurring the cost (in terms of welfare) of creating markets based on high-quality perceptions upheld through eliminating price competition and suppressing the information generated through the market. In a market economy there is no

room for competition based on which supplier is more successful in creating an aura around a product by suppressing information that the market, in particular its consumers and dealers, would create about the product. This view is grounded in the assumption that in a market economy and in particular in the information environment of today consumer decisions, which are based on horizontally-generated information such as the price or an image built-up by letting consumers participate in creating the emotional aura or the brand that surround the tangible product, are more valuable than decisions made because the supplier was enabled by the law to suppress information about the product's tangible and intangible features that would be generated by the market.

IV. The legal implications of the above view

A. A broad theory of harm

Based on the considerations above it can be concluded that RPM is beneficial in terms of welfare only in cases, in which there is an informational market failure and the price as quality signal model applies. As it is very rare that in the information environment of today there is a product market, in which there is an informational failure that can only be remedied through RPM, RPM will in most instances be harmful; this applies, even if the supplier has no (horizontal) market power, as the elimination of intrabrand price competition cannot be considered to be outbalanced by interbrand competition, unless an informational market failure exists.

For the EU approach to RPM this means the following.

With regard to Art. 101 (1) TFEU it is economically justified to presume negative effects of RPM and to automatically classify RPM as object restriction. The elimination of intrabrand competition cannot be considered to be outweighed by interbrand competition. The reason why the supplier is interested in the elimination of intrabrand competition, which is also for him a cost, is that RPM is used to increase sales by creating the perception of high quality, which either creates emotional effects based on an artificially-upheld price or a false signal that anchors the consumer decision. In both cases negative effects can be assumed, either because

an inefficient type of market is artificially created, on which it is competed on vertically-controlled perceptions of high quality, or because the consumer is led to a biased decision. In both cases competition is moved away from its ideal of perfect information and rational consumers.

It can also be presumed that it is highly unlikely that RPM fulfills the conditions of Art. 101 (3) TFEU. Only the price as quality signal should be accepted as pro-competitive justification for RPM. The price as utility justification cannot be accepted as it is impossible to distinguish price as utility and price as biasing mechanism so that positive welfare effects cannot be expected.

B. The price as quality signal justification

1. The price as quality signal justification and its place in the EU legal framework

With regard to the implementation of the price as quality signal justification into the EU framework the question arises whether it would have to be considered under Art. 101 (1) or (3) TFEU.

Currently under EU law RPM cannot escape the automatic finding of an "object restriction", the ECJ made it clear early on that any type of pro-competitive justification of RPM would have to be considered under Art. 101 (3) TFEU,[752] which is why the service-based positive models discussed in chapter 2 and 3 were discussed by the Commission in its Vertical Guidelines as possible individual exemptions under Art. 101 (3) TFEU.

Nevertheless, in the debate on the EU's strict stance on RPM the claim has been made that possible efficiencies of RPM should be considered already under Art. 101 (1) TFEU. The argument of *Ibanez-Colomo* and *Lamadrid* for example is that not considering potential pro-competitive justifications already under Art. 101 (1) TFEU is in stark contrast to what they identify as the default methodology of the ECJ when assessing not only other (non-price) vertical restraints, but more generally any kind of restraint under Art. 101 (1) TFEU,[753] namely that a restraint will be deemed 'restrictive by object' only to the extent that it is not a plausible

[752] See above chapter 1 II.B.
[753] Ibanez-Colomo (2012: 546). Similar Ibanez-Colomo and Lamadrid (2016: 30-31).

source of efficiency gains.[754] That the ECJ in particular let vertical non-price restraints escape the 'object restriction' classification because they were, in the abstract, a plausible source of efficiency gains, to which conclusion the Court came by identifying the reasons why the parties would agree to the restraints under consideration,[755] is considered by *Ibanez-Colomo* an inexplicable difference to its strict stance on RPM because of the broad economic consensus that RPM most often leads to efficiencies and cannot be in any way equated to horizontal price-fixing.[756]

There are two reasons why the price as quality signal should not be considered already under Art. 101 (1) TFEU.

First, it is not as clear as *Ibanez-Colomo* and *Lamadrid* suggest that considering efficiencies already under Art. 101 (1) TFEU is the ECJ's default methodology; the structure of Art. 101 TFEU with its three paragraphs suggests otherwise. Second, and more importantly, the main argument that is used to claim that possible efficiencies should be considered already under Art. 101 (1) TFEU is primarily that RPM in most instances will be pro-competitive (thus also *Ibanez-Colomo's* reference to the broad economic consensus regarding the efficiencies of RPM) and that thus the burden of proof needs to be reversed. It is true, that, if in most cases the explanation for why the supplier uses RPM is that it intends to achieve efficiencies, it may be difficult to defend an automatic finding of an object restriction, in particular if it is not so clear what could be the theory of harm otherwise. But the thesis argues otherwise and assumes that the price as quality signal is the only plausible positive explanation of RPM, which will rarely, if ever, apply; rather in most instances the finding of an object restriction will be perfectly economically justified. Thus, considerations based on the very rarely applicable price as quality signal explanation should be kept under Art. 101 (3) TFEU and there is no need to shift burdens of proof.

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[754] Ibanez-Colomo (2012: 549). See also Ibanez-Colomo (2016: 21) ("An analysis of the case law suggests that, in principle, by 'by object' label is only deemed appropriate for practices that are not plausibly pro-competitive in the economic and legal context of which they are part. This approach is based on the idea that, where a practice is not a credible source of efficiency gains, it is safe to presume that it cannot have a net positive impact on competition. By the same token, the 'by object' label is deemed inappropriate for practices that are plausibly pro-competitive.").

[755] Ibanez-Colomo (2012: 549) argues that "[a]n overview of the case law suggests, that, where the parties to the agreement are in a vertical [] relationship, an analysis of the nature of the agreement in the abstract seems to be sufficient to draw conclusions about the plausibility of the efficiency explanation for the restraints found" (with reference to ECJ 30.6.1966, Case 56/65, ECLI:EU:C:1966:38 – *STM*, ECJ 28.1.1986, C-161/84, EU:C:1986:41 – *Pronuptia*, ECJ 25.10.1977, Case 26/76, EU:C:1977:167 – *Metro I*, ECJ 8.6.1982, 258/78, ECLI:EU:C:1982:211 – *Nungesser*.

[756] See e.g. Ibanez-Colomo (2012: 553) with reference to Motta et al. (2009).

2. The application of the price as quality signal justification of RPM – the example of school bags

As already mentioned above, the price as quality signal justification must be cautiously assessed, in particular it must be made sure that suppliers do not use this justification as a pretext to hide other motivations, which are not acknowledged as pro-competitive explanations. This is in particular important, because, as argued above, RPM must be considered harmful under the alternative explanations, which do not provide pro-competitive justifications of RPM. It must thus be cautiously defined whether there truly is an informational market failure, which is as argued above highly unlikely in today's information environment.[757] In addition, in the information environment of today with the shifts in consumer behavior described above[758] there are hardly any signals left, which the producer may use to market and brand its product and which are under the sole control of the supplier,[759] thus it appears to be very likely that suppliers may be using the price as quality signal even where there is no informational market failure, namely to get a handle on the perception of its product more generally (a situation that is described in price model 2 and 3).

The *Scout school bags* case[760] offers an illustration of how legal actors may be led to rely on the model too hastily.

(a) The case of *Scout school bags*

Even though the *Scout school bags* case concerns not RPM, but the prohibition of internet sales over third-party platforms, the case is relevant and provides an excellent illustration, because the court examines the question of whether the product image needs to be protected either as quality signal[761] or as component of the product.[762] More specifically the court discusses under Art. 101 (1) TFEU whether the protection of the image could justify the organization of a

[757] On this above chapter 4 II.C.2.
[758] On this see above chapter 3 II.B.
[759] On the definition of "brand" see above chapter 1 I.
[760] First instance: Landgericht Berlin 21.4.2009, 16 O 729/07 (Kart) ECLI:DE:LGBE:2009:0421.16O729.07KART.0A – Scout school bags ("LG Berlin 2009 – Scout school bags") Second instance: Kammergericht Berlin 19.9.2013, 2 U 8/09 (Kart), ECLI:DE:KG:2013:0919.2U8.09KART.0A – Scout school bags ("KG Berlin 2014 – Scout school bags").
[761] KG Berlin 2014 – Scout school bags: para. 52.
[762] KG Berlin 2014 – Scout school bags: para. 57-63.

selective distribution system excluding sales over third-party platforms;[763] with reference to and based on an article by *Franck*[764], which was published in-between the two decisions, the court distinguishes two economic explanations for why the protection of the image may be justified, namely "image as component of the product" and "signaling high product quality through investment in the product image"[765]. The former explanation corresponds to our price model 1 (the price as quality signal model), the latter to our price model 2 (the price as utility model). What the court does not consider is that there may be third explanation, namely price model 3, which could provide the explanation for the use of RPM. The Kammergericht Berlin closely follows *Franck's* argumentation; it in general accepts both explanations as potential justifications for organizing a selective distribution network that excludes sales over ebay; it also follows *Franck* in that it rules that, while the image as product component explanation does not apply to *Scoot school bags*, the conditions for the image as quality signal explanation are fulfilled and that thus the exclusion of dealers, which sell over ebay, is justified and cannot be considered an 'object restriction' under Art. 101 (1) TFEU.

(b) The courts' argumentation

In view of the findings of chapter 4 that the price as quality signal model will rarely apply it is surprising how quickly and with how little analysis the court in *Scout school bags* concludes that the economic justification of image as quality signal applies.

The court merely holds that the signaling of a high product quality can "in general" justify a selective distribution system pointing out that "as buying decisions in lack of sufficient information often are made based on price, suppliers of high quality products have an interest in signaling to [consumers] that their products are of higher quality than the average"; it also shortly explains how the image as a product component works.[766] But the court does not examine whether the conditions of the model apply to the products at issue. The court merely mentions that the signaling of quality through an image is "from the viewpoint of competition necessary in particular where it is difficult for the average informed consumer to assess this quality as with the purchase of products that are longer and more intensively used for which the value in use is known only after some time has passed"[767]. The court refers here to experience

[763] KG Berlin 2014 – Scout school bags: para. 52
[764] Franck (2010).
[765] KG Berlin 2014 – Scout school bags: para. 52
[766] KG Berlin 2014 – Scout school bags: para. 58.
[767] KG Berlin 2014 – Scout school bags: para. 58

goods, for which the explanation may possibly apply, as an informational deficit is most likely in case of such goods. But the court does not analyze whether the products at issue, *Scout school bags*, can be considered experience goods and whether this means that it can be concluded that an informational deficit on the market exists that can only be mitigated through building up and protecting a high quality image. It merely holds that "it can be assumed that the plaintiff has positioned its products on the market … with quite some advertising expenditures as school bags of high quality"[768] noting that "the advertising refers to the elaborate design and in addition to the good test results"[769] before turning to the issue of whether sales over ebay can damage the high quality image of Scout school bags.[770]

(c) The arguments of *Franck*

Franck on the other hand, to which the court refers and whose article was published in between the first and second instance of the *Scout school bags* case, offers a deeper analysis of the case coming to the same conclusion as the court. *Franck* explicitly points to the conditions under which the image as quality signal explanation can apply arguing that the products concerned must be subject to adverse selection due to informational deficits on the market, which requires structural information deficits on the markets and that the products are of high quality.[771] With regard to the *Scout school bags* case *Franck* argues that both conditions are satisfied. Of interest here is in particular *Franck's* argumentation with regard to an informational market failure in case of school bags. Franck argues that the characteristics of school bags such as wearing comfort, durability and water impermeability will crystallize only after a longer time period and that even more importantly the ergonomic quality in view of possible orthopedic damage cannot be assessed and can possibly be considered a credence quality.[772] He finds that as an information mechanism parents can only resort to consumer tests and the experience of friends and relatives.[773] This lets *Franck* conclude that there is an informational market failure on the market for school bags.

[768] KG Berlin 2014 – Scout school bags: para. 60
[769] KG Berlin 2014 – Scout school bags: para. 60
[770] KG Berlin 2014 – Scout school bags: para. 61-63
[771] Franck (2010: 783)
[772] Franck (2010: 783)
[773] Franck (2010: 783)

(d) Analysis: Price as quality signal or to bias consumers?

Based on the analysis of the apparent likelihood of an informational market failure underdone in chapter 4 and against the background developed above, it can be argued that even in case of goods like school bags, whose quality the consumer will experience only after using the product for some time, one must be highly skeptical that in the information environment of today, described above, high quality will not be known unless signaled through an image that is upheld through restricting dealer competition. *Franck* mentions the information mechanisms of resorting to consumer tests and the experience of friends and relatives; what he does not consider is how the internet has accelerated the use and reach of such mechanisms which makes it very unlikely that consumers would not know about the high quality of experience products without a legally protected image or artificially created price as quality signal. In short, and this has been argued in detail above, in the information environment of today it is highly likely that there could be the risk for adverse selection in the sense of *Akerlof*.

Courts and enforcement agencies need to closely examine whether adverse selection could be at risk. While it is true that a court or agency cannot second-guess whether a supplier chooses the most efficient mechanism, the point made here is not about the court second-guessing the supplier's choice, but about making sure that the motivation behind choosing a particular restraint to protect an image or RPM to create an artificial price level is not a different one, in particular not one that leads to negative effects on welfare. As with the consumer bias model there is now an explanation, in which the supplier benefits from a vertical restraint, while the economy, or in particular consumers do not, it must be closely examined whether the protection of image as quality signal is merely a pretext. That a supplier chooses to use an image protected by vertical restraints or a high price upheld by RPM as quality signal can often be explained by the supplier preferring a quality signal that it can vertically control, because consumer decisions can be anchored through it or because the supplier is not ready to let go of control over information and image signals, which is a consequence of the shifts in consumer behavior.[774] As there are alternative explanations for why the supplier would want to use a quality signal that is based on the elimination of intrabrand competition and prevent the consumer from relying only on horizontally-created information, which the supplier cannot control, the quality signal explanation (be it through image or price) needs to be interpreted very restrictively and with great care. In particular, it is important to consider whether not instead the consumer bias model explains the specific case better.

[774] On the shifts in consumer behavior and its implications for firms see above chapter 3 II.B.

Franck already gives two reasons that point into the direction that an image is created that leads to a biased decision in the *Scout school bags* case. *Franck* notes that while parents make the purchase they do not use the product themselves so that low quality is not easily recognized and that repeat purchases are not typical anyway. Though *Franck* raises these two points to show that there are informational deficits, more likely this could be a reason for why using a false signal of high quality may not be corrected by the market and could work for a supplier.[775] It thus may be argued that the consumer bias model provides the more accurate explanation for the use of RPM in the *Scout school bags* case. At least it can be said that the court in *Scoot school bags* should not have so readily accepted that there is an informational market failure.

It has to be considered though that without the possibility to refer to an alternative explanation it can be understood why the court chose to find the quality signal model to be applicable. Otherwise it would have had no explanation why the supplier would want to eliminate intrabrand competition. The court in the *Scout school bags* case had already denied the applicability of the "image as a product element" justification,[776] before reverting to the image as quality signal explanation. It is true, as it has been often pointed out, that the fact that the supplier uses a restraint is the critical piece of information – as long as there was no broad explanation, in which producer and consumer interests were not aligned, it was plausible to a certain extent to conclude that this could only mean that interbrand competition is enhanced. As now there are two explanations of RPM, in which the supplier profits from the RPM, but competition is nevertheless harmed, this conclusion cannot be made anymore. With the rejection of the welfare effects prediction under the price as utility model and the development of the consumer bias explanation the critical piece of evidence that RPM is used gets the opposite meaning – as now only in the very rare and mainly theoretical market failure explanation interbrand competition can be said to be enhanced, at least this is what is argued here with regard to price restraints.

[775] Franck (2010: 783)

[776] KG Berlin 2014 – Scout school bags: para. 53-56.
Both the Landgericht Berlin in the first instance and the Kammergericht Berlin in the second instance found that *Scout school bags* are bought not primarily because the consumer desires the image attached to the product, but because of the quality of the product, in particular its quality and safety feature. The Landgericht argues that school bags are bought not as prestige objects but, in particular because they are a necessary item for school children, as object of daily use (LG Berlin 2009 – Scout school bags: para. 37). The Kammergericht emphasizes that the supplier itself mainly refers the product feature in its advertising (KG Berlin 2014 – Scout school bags: para. 55).

V. Conclusion: The economic justification of prohibiting RPM

This chapter looks at the price-based models of RPM from a broad perspective of economics combining the findings on the welfare effects of RPM with considerations of the function of competition as discovery procedure. The chapter can be understood as an attempt to build a broad theory of harm that can justify the EU's approach to RPM. It is meant as the start for a new debate on RPM. The shift from service- to price-based models has opened up new possibilities here, as the well-established welfare models struggle to explain image-led markets and blend out consumer preference formation. This creates room for new considerations on the effects of RPM on welfare and competition from different angles and in particular for connecting antitrust with brand scholarship as the focus of the three price-based RPM models is on the creation of a high quality perception which is part of what is often termed as brand.

Chapter 6: CONCLUSION

In his 2007 thesis *Paldor* asked "Did the courts have it right all along?"[777] and argued that the per se prohibition is the correct legal approach to RPM – in the current climate, in which the prevailing economic view argues the opposite, *Paldor's* thesis has remained a rare exception. Though building a very different type of argument, this thesis comes to the same conclusion: ECJ and Commission had it right all along. The automatic classification of RPM as 'object restriction' by the European courts and the Commission's reluctance to accept the pro-competitive justifications provided in the economic literature are justified from an economic point of view.

The thesis' important contribution hereby is that by engaging systematically with the empirical evidence, on which the 'economic consensus' is built, it can show that the current focus of the RPM debate has been wrong. The service-based models of RPM, which predict positive effects on welfare, are inconsistent with the real world phenomenon of RPM. Insofar the Commission is correct in its presumption that these models do not apply. Nevertheless, an explanation must be found for why the supplier desires RPM, if it is not the service-based models. To merely point to the elimination of intrabrand competition is not sufficient, as where this type of restriction is implemented vertically on the initiative of the supplier, it is a cost to the supplier so that there must be some offsetting benefit to the supplier, which possibly could outweigh not only the cost to the supplier but also the harm to intrabrand competition.

The thesis proposes to fill the gap created by the rejection of the service-based models with very similar RPM models, which do not focus on services but on the price instead. These models, though not entirely new, have not found their way into the RPM debate yet, but should be the center of debate. The thesis analyses three price-based models coming to mixed conclusions when welfare effects are considered. In all three models RPM is used to create the perception of a high price – either as true quality signal, as component of the product or as a misleading price signal that anchors the consumer decision; but though the supplier can increase sales in all three models the welfare effects remain unclear, in particular as the welfare effects

[777] Cf. the title of *Paldor's* unpublished thesis (Paldor (2007)).

on image-led markets are unclear and here the difficult terrain of consumer preference formation is entered.

As welfare economics struggles to predict the effects of RPM in the price-based models, this opens up the room for debate. Suddenly it is not so clear anymore that consumer and producer interest are aligned in the absence of (horizontal) market power, which is the key message of the economic consensus that led the US Supreme Court in *Leegin* to give up the century-old per se prohibition of RPM. The crucial issue of divergence defined in chapter 1 is not so clearly won by the economic consensus as now it is about image-led markets, which welfare economics struggles with and mainly refuses to examine.

Chapter 5 approaches the issue of how RPM in the price-based models should be evaluated by drawing on the findings of *Hayek* and employing a view of "brands" whereby the creation of the intangible component is considered to be made up by many sources, which may or may not be under the control of the supplier, thereby coming to the conclusion that RPM can be considered to be most often harmful to competition.

The argument is in particular that only in the cases, in which price is used as quality signal, the elimination of intrabrand competition can be justified by the enhancement of interbrand competition, as RPM is used here to mitigate a market failure. In the other two models, even though the supplier can enhance its position through RPM on the interbrand level, this cannot justify the elimination of intrabrand price competition. RPM in these models is used to enable the supplier to compete on the vertically-controlled high perception of the good or to anchor the consumer decision on the vertically-controlled price. In both models ultimately RPM is used to suppress information generated through price competition thereby harming competition.

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