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# Competition Challenges in the Consumer Internet Industry

How to Ensure Fair Competition in the EU



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## Executive Summary English

### PROBLEMS

- ▶ **The consumer internet industry**, which encompasses the totality of consumers as well as producers and service providers using the internet as a means to buy or sell products and services to end-consumers, **is likely to be hit by competition problems.**
- ▶ **This study focuses on “data” and on “access to consumers”.** These factors are both (1) outputs resulting from entrepreneurial activities on digital retail markets and (2) wholesale inputs for entrepreneurial activities on these (or other) retail markets. As a result, “data” and “access to consumers” **drive competition problems since they (1) self-reinforce market power and (2) enable the transfer of market power across markets.**
- ▶ We identify **four specific competition problems** in the consumer internet industry.
  - **Problem 1: Denial of access.** As a result of their activities on retail markets, enterprises may gain a dominant position in the wholesale markets for data or access to consumers. Consequently, they have an incentive to deny competitors access to these inputs. Given that data and access to consumers may be essential inputs to activities on a great number of very diverse retail markets, this **may result in a small number of enterprises gaining market dominance on a number of very different retail markets.**
  - **Problem 2: Tying and bundling.** Enterprises may tie and/or bundle retail products and services in an attempt **to gain market power on markets for data and/or access to consumers.**
  - **Problem 3: Market power abuse within wholesale markets** for data and access to consumers.
  - **Problem 4: Competitive distortions to the detriment of European enterprises due to differences in data protection law**, especially regarding export of personal data to the USA.

### RECOMMENDATIONS

#### Regarding problems 1 - 3

- ▶ **EU policy makers should restrain from legislative action.** Given the innovative character of the consumer internet industry and the versatility of its wholesale markets, the added-value of sector-specific regulation is very limited.
- ▶ Instead, **competition authorities should define wholesale markets for data and access to consumers** within the consumer internet industry. Having done so, **existing European competition law can adequately deal with problems 1 - 3.**
- ▶ In particular, applying **the “essential facilities doctrine” in EU competition law** offers significant potential. It may force enterprises with a dominant position in the wholesale

markets for data and access to consumers to grant competitors paid access to these wholesale inputs. This **may hinder a small number of enterprises gaining market dominance on a number of very different retail markets.**

#### **Regarding problem 4**

- ▶ **Action by EU policy makers is necessary** to avoid competitive distortions between EU and US-American enterprises. The method of choice to avoid such problem is not competition law, but will be data protection law. The most relevant distortions are to be expected between the EU and the US. Following the ECJ declaring the Commission's "safe harbor decision" invalid, and under the upcoming general data protection regulation, **it is now up to the EU-Commission and the European Data Protection Board to ensure that no major differences persists between data protection regimes governing European and US services providers competing for European customers.** This would distort competition to the disadvantage of European service providers. The EU-Commission may use an updated "adequacy decision" and the European Data Protection Board may use standard data protection clauses or binding corporate rules to reach this aim.

## Executive Summary Deutsch

### PROBLEMBESCHREIBUNG

- ▶ **Die Consumer Internet Industry** umfasst alle Verbraucher, Hersteller und Dienstleister, die über das Internet Produkte und Dienstleistungen (ver)kaufen. Sie **ist einer Reihe von wettbewerblichen Problemen ausgesetzt**.
- ▶ Fokus dieser Studie sind **“Daten” und der “Zugang zu Verbrauchern”**, die gleichzeitig (1) das Ergebnis von unternehmerischen Aktivitäten auf digitalen Endkundenmärkten und (2) Vorleistungen für unternehmerische Aktivitäten auf diesen (oder anderen) Endkundenmärkten sind. In der Folge **treiben “Daten” und der “Zugang zu Verbrauchern” wettbewerbliche Probleme, da sie (1) zu einer sich selbst verstärkenden Marktmacht führen und (2) die Übertragung von Marktmacht auf andere Märkte ermöglichen**.
- ▶ Wir erkennen **vier konkrete wettbewerbliche Probleme** in der Consumer Internet Industry.
  - **Problem 1: Zugangsverweigerung.** Größere Anbieter auf digitalen Endkundenmärkten erlangen eine Marktmacht auf den Vorleistungsmärkten für Daten und für den Zugang zu Verbrauchern. In der Folge haben sie einen Anreiz, Wettbewerbern den Zugang zu diesen beiden Vorleistungen zu verweigern. Wenn Daten und der Zugang zu Verbrauchern aber **“unerlässliche inputs” (essential facilities)** für viele, sehr unterschiedliche Endkundenmärkte sind, **kann eine kleine Anzahl von Unternehmen eine Marktmacht auf sehr verschiedenen digitalen Endkundenmärkten erlangen**.
  - **Problem 2: Kopplung und Bündelung.** Unternehmen koppeln oder bündeln Produkte und Dienstleistungen für Verbraucher und erlangen eine **Marktmacht auf den Vorleistungsmärkten für Daten oder den Zugang zu Verbrauchern**.
  - **Problem 3: Missbrauch einer marktbeherrschenden Stellung auf Vorleistungsmärkten** für Daten und den Zugang zu Verbrauchern.
  - **Problem 4: Wettbewerbsverzerrungen zum Nachteil europäischer Unternehmen aufgrund unterschiedlicher Datenschutzgesetze.** Relevant ist insbesondere die Übermittlung personenbezogener Daten in die USA.

### EMPFEHLUNGEN

#### Probleme 1 - 3

- ▶ **Die EU sollte nicht gesetzgeberisch tätig werden.** Angesichts der Innovationskraft der Consumer Internet Industry und der Vielseitigkeit ihrer Vorleistungsmärkte ist **der Nutzen** einer **sektorspezifischen Regulierung gering**.
- ▶ **Die Wettbewerbsbehörden sollten stattdessen Vorleistungsmärkte für Daten und den Zugang zu Verbrauchern** in der Consumer Internet Industry **abgrenzen. Auf diese Weise kann das EU-Wettbewerbsrecht die Probleme 1–3 angemessen lösen**.

- ▶ **Die Anwendung der "essential facilities"-Doktrin des EU-Wettbewerbsrechts ist vielversprechend.** Sie kann Unternehmen mit einer beherrschenden Stellung auf den Vorleistungsmärkten für Daten und den Zugang zu Verbrauchern dazu zwingen, Zugang zu diesen Vorleistungen zu gewähren. Dadurch kann verhindert werden, dass **eine kleine Anzahl von Unternehmen eine Marktmacht auf sehr verschiedenen digitalen Endkundenmärkten erlangt.**

#### **Problem 4**

- ▶ Die EU-Kommission muss tätig werden, um Wettbewerbsverzerrungen, insbesondere zwischen EU-Unternehmen und US-Unternehmen, zu verhindern. **Nach dem EuGH-Urteil zu "Safe Harbor" müssen die EU-Kommission und der European Data Protection Board nun sicherstellen, dass für europäische und US-amerikanische Unternehmen im Wettbewerb um europäische Kunden vergleichbare Datenschutzvorschriften gelten.** Die EU-Kommission kann dieses Ziel mit einer aktualisierten "Angemessenheitsentscheidung"; der European Data Protection Board mit Standardvertragsklauseln und verbindlichen unternehmensinternen Datenschutzregelungen (Binding Corporate Rules) erreichen.

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## Scope and Structure of this Study

In recent months, a number of authors have discussed topics related to the digitalisation or digital disruption of our economy. Whereas Roland Berger<sup>1</sup> focuses on the changes in industrial value creation; Van Gorp and Batura (2015) and Monopolkommission (2014) deal with a range of competition (non-)problems in the wider sphere of the digital economy.

This study deals with competition issues in the consumer internet industry. The focus of the study lays on competition challenges emanating from the importance data and access to consumers in the digital economy. We argue that a high number of competition problems, both within single retail markets of the consumer internet industry and across markets, can be appropriately dealt with using European competition law by defining “data” and “access to consumers” as wholesale markets within the consumer internet industry.

In **Chapter 1**, we shortly introduce the concept and the particularities of the consumer internet industry. We further illustrate the concept with a number of examples.

In an attempt to de-emotionalise the controversy on allegedly all-powerful internet giants, **Chapter 2** starts with a short introduction on the concepts of markets and their definition according to European competition law. We then apply these concepts to the consumer internet industry by differentiating between retail markets for digital services and appliances on the one hand and wholesale markets for data and access to consumers on the other hand.

It requires an “abuse” of “market dominance” to be in breach with European competition law. Hence, in **Chapter 3**, we first deal with the difficulties of determining such market dominance in the first place. These difficulties are present all the more in the markets of the consumer internet industry, many of which show elements of platform markets.

Subsequently, we give a short introduction on the most common types of abusive behaviour. We apply this to the markets for data and for access to consumers as key wholesale markets of the consumer internet industry. In doing so, we identify three main potential competition problems.

Finally, still in chapter 3, we discuss the role of data protection regulation for competition. We focus on competition distortions between the EU and the USA and discuss the ECJ's judgement of “safe harbor” and its consequences for guaranteeing a level playing field. Against this background, we identify a fourth competition problem caused by a potentially unlevel playing field for data processing for enterprises in the EU and such ones in third countries.

**Chapter 4** starts with an economic assessment on the necessity to intervene against market dominance. We apply the theory of contestable markets to the markets of the consumer internet industry. In doing so, we take duly into consideration the fact that many of the consumer internet industry's alleged bottlenecks are not of a physical, but of an intellectual property type. Also, we take into account the importance of protecting innovative efforts against free-riding.

Second, for each of the four competition problems identified in chapter 3, we analyse whether and how they can be best dealt with within the existing European legal framework. We investigate whether ex-ante sector specific regulation can play a useful role in dealing with competition problems on the wholesale markets for data and access to consumers in the consumer internet industry.

**Finally**, we summarise our findings and issue recommendations.

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<sup>1</sup> Roland Berger Strategy Consultants (2015)

## CHAPTER 1: The Consumer Internet Industry

This chapter gives a short introduction to the concept of the “consumer internet industry”. We stress three particularities of the consumer internet industry and illustrate the challenges arising from this with a number of examples.

### 1 The Consumer Internet Industry: Concept and Particularities

The “consumer internet industry” encompasses the totality of consumers as well as producers and service providers using the internet as a means to buy or sell products and services to end-consumers. Stimulated by the growing digitalisation of our economies, the consumer internet industry amongst others has

- massively altered distribution channels (also for offline products and services),
- caused a series of innovative products and services to arise,
- added a new digital component to many existing products and services, and
- enabled a number of digital players to enter traditionally non-digital markets, causing hitherto unrelated enterprises to become competitors.

The consumer internet industry brings forward many new, innovative products and services and at the same time alters existing products and services by adding a digital added-value. Without any doubt, digitalisation has led to major changes in consumer patterns. While in 2004 only 20% of individuals in the EU ordered products or services online, this figure rose to more than 50% in 2014.<sup>2</sup> Obviously, this trend has been reinforced by the development of new devices such as smartphones, tablets or smartwatches that make it constantly easier to buy and use products and services online.

What makes the consumer internet industry especially interesting is the fact that digital service providers enter into hitherto non-digital markets which seem very remote from the one(s) in which these digital services providers have been present in the past. In that way, seemingly unrelated enterprises suddenly become competitors.

From a corporate point of view, this “digital disruption” poses considerable challenges to “traditional” service providers or manufacturers, who are faced with new and very innovative competitors.

From a more general economic perspective, the consumer internet industry mirrors an unstoppable technological progress, which has the potential of far-reaching innovation to the benefit of consumers. However, this potential will be tapped only when the consumer internet economy remains characterised by a high degree of competition and hence innovation.

Recently concerns have risen on potential market dominance problems in the area of the consumer internet industry. Such complaints often reflect the individual interests of those not getting to grips with increased innovation and competition.

Nevertheless, there are at least three **particularities** giving reason to unbiasedly investigate potential competition problems in the consumer internet industry.

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<sup>2</sup> Eurostat - Community survey on ICT usage in Households and by Individuals.

- (1) Arguably more than any other industry, the consumer internet industry is characterised by **platforms**. These platforms are often very complex and multi-sided. Given that mechanisms for measuring market power of such platforms are not conclusively clarified and taking into account the short innovation cycles of the consumer internet industry, there remain serious concerns of market concentration due to the omnipresence of platforms.
- (2) There is reason to believe that concentration tendencies are accelerated by some digital services providers having **privileged access to “data”**. Many innovative products and services can be offered only (or at much more competitive prices) when data on users' behaviour and preferences are available. As we will show, this data may be both a barrier to enter a certain market, an output of existing activities and an essential input to entirely different activities at the same time. There is a considerable risk of markets being non-contestable due to this effect.
- (3) Some enterprise may have **privileged “access to consumers”**. Given digital distribution channels, this access is often decisive for the success of a product or service. Being able to contact consumers directly eases the direct interaction with the customer and facilitates the selling or delivery of new products and services. If vertically integrated, an enterprise may be able to prevent competitors in any way from accessing “their” consumers. This might negatively affect competition and innovation in the consumer internet industry.

## 2 The Consumer Internet Industry Exemplified

### 2.1 Example 1: Smart Homes

Examples of consumer related digitalisation of homes are manifold: refrigerators may place orders autonomously when foods start running out and heating-devices may anticipate residents' time of departure or arrival to accordingly regulate in-house heating.

Early 2014, Google bought Nest, a producer of thermostats and smoke detectors, and thereby entered the market for home automation.<sup>3</sup> Apple soon intends to release HomeKit, a smart home platform for Apple's devices. This platform, for which developers may create applications, should enable customers to steer compatible equipment within houses.<sup>4,5</sup> Other companies as well, such as Facebook, Samsung, LG and many others try to extract profit by extending the markets they are active in traditionally to interfering in the smart homes market.<sup>6,7</sup>

In many cases, the added-value of these new services is dependent upon data on consumers being available to the supplier of the service. Suppliers with such knowledge - about the consumers' food preferences via insight in online purchases or paying data and about users' mobility patterns via smartphone tracking - may be able to correctly replenish the refrigerator and switch on the heating at correct times. Today, most traditional manufacturers of fridges or heating systems are not in possession of these data. It remains to be seen whether the companies that are in possession of these data are willing to cooperate with traditional manufacturers and at which price they are

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<sup>3</sup> SPIEGEL ONLINE (2014).

<sup>4</sup> Macworld (2014).

<sup>5</sup> Heise (2015).

<sup>6</sup> Trusted Reviews (2014).

<sup>7</sup> SmartGridNews.com (2015).

willing to make available the data. Alternatively, those in possession of data might start building “smart fridges” or “smart heating systems” themselves.

## 2.2 Example 2: Digital Health Services

eHealth, wearables, telemedicine or quantified self are just a few of the buzzwords that mark digitalisation in the health sector. This often starts from more easily measuring people’s behaviour or real time health status (food consumption patterns, counting steps taken, analysing sleep patterns) using apps, smart watches or t-shirts with sensors embedded. Besides better awareness on the side of patients themselves, this may enable automatic emergency calls for patients at risk of heart failure or may lead to medical personnel to supervise blood pressure of elderly people from the distance making it no longer necessary for patients to take a long ride to their practitioner.<sup>8</sup> New technologies may both save money and lives.

Obviously, these technologies create a mass of highly informative data on individuals' health. This data might be of high relevance amongst others for hospitals, (potential) employers and insurance companies.

A company being in possession of this data may have very good chances on the insurance market. It would be able to assess individual health risks in a way that traditional competitors would never be able to do. Hence, it may pick out the “good risks” and offer these people insurance premiums at lower costs than competitors can. As a consequence, the insurance costs for the remaining “bad risks”, which are still insured with traditional insurance companies, would rise.

## 2.3 Example 3: Paying Services

The payment process is a front-runner for digitalisation in the banking industry. Fintechs offer simple online payment solutions and develop mobile wallets and other payment methods based on digital devices.

Many of these processes run on smartphones. Their operability depends on a number of technical preconditions. Firstly, compatibility with the smartphone's operating systems is a precondition. Secondly, the payment software (often an App) must be downloadable on the operating system's app platform. Given that the operating system might itself offer such paying services (vertical integration), this is not self evident.

In any case, operating an online payment solution gives the provider access to a high amount of sensitive data on consumers' purchasing behaviour. This information may be used to sell it for purposes such as advertising (ideally on the same interface as the one used for the payment process in the first place). Hence both data and user access may be used to transport market power.

## 2.4 Example 4: Shared mobility

Car sharing is a phenomenon shackling the automotive sector. Some estimate that about 50% of individuals in industrialised countries are willing to let others use their car.<sup>9,10</sup> In Germany, e.g., the number of registered car sharing users has passed one million in early 2015.<sup>11</sup> Moreover,

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<sup>8</sup> Wirtschaftswoche (2014).

<sup>9</sup> Roland Berger Strategy Consultants (2014).

<sup>10</sup> Not only the cars market is subject to radical change. The sharing economy does also drastically change the market for private accommodation rental, for instance (Airbnb).

<sup>11</sup> Bundesverband CarSharing (2015).

companies such as “Uber”, the US-based online intermediation service for car rides, offer shared mobility.

Again, these services are often offered via smartphone apps. Hence, being able to gain access to the user by accessing the smartphone is an important competition issue. Car manufacturers are affected as well. This evolution has an impact on sales figures of car manufacturers. Moreover, the prospect of some suppliers offering both the internet platform for mediating car sharing as well as the operating system of the self-driving car actually used, enables an more efficient use of data. At the same time, it may limit competition on the market for shared mobility as a very limited number of companies may set the platforms for communication and may pool all data.

### 3 Conclusion

The consumer internet industry encompasses the totality of consumers as well as producers and service providers using the internet as a means to buy or sell products and services to end-consumers. It is characterised by (1) complex and multi-sided platforms as well as by (2) the high relevance of “data” and (3) adequate “access to consumers”. These three elements give rise to competition concerns within the consumer internet industry.

## CHAPTER 2: Markets and the Role they play in the Consumer Internet Industry

Discussing competition challenges is possible only having defined the markets in which the challenge is presumed. Hence, in this chapter, we first offer a short and general explanation of how markets are defined and how market dominance is determined. Secondly, we offer a concise description of some of the most relevant retail markets in the consumer internet industry. We introduce in some detail two of the consumer internet industry's most important wholesale markets, i.e. the markets for "Data" and for "Access to Consumers". We describe their importance to the consumer internet industry and their relevance to competition challenges.

### 1 The Concepts of Markets and Market Dominance

#### 1.1 Defining Markets

Any assessment of an alleged anticompetitive behaviour depends on the definition of the relevant market. The market definition aims at identifying those competitors of an undertaking which are able to constrain the latter's behaviour and prevent it from behaving independently of effective competitive pressure.<sup>12</sup> In order to find all competitors, one has to determine the relevant product market in the first place. After that, the relevant geographic market has to be determined.

The Commission defines relevant product markets as follows: "A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by the reason of the products' characteristics, their prices and their intended use".<sup>13</sup>

In order to determine the products which consumers consider as substitutes, consumers are asked whether they would substitute a product by another product if the price for a certain product (for instance product A) increases by 5 to 10%. This test is called SSNIP-Test: Small but Significant Non-transitory Increase in Price.<sup>14</sup> Due to the price increase, consumers may switch to other products such as products B or C. If they do so to a degree that the price increase is not profitable for companies selling product A, then products B and C are viewed as substitutes. That means that the relevant market is not limited to product A, but includes the products B and C as well. The relevant product market then needs to be widened.

In this case, the SSNIP-Test has to be repeated by asking consumers whether they would substitute product A, B or C by another product if the price for product A, B and C increases by 5 to 10%. The final relevant product market is determined if the price increase is profitable for the companies producing the relevant products due to a low degree of substitutability by consumers.

In some specific cases, also the supply-side substitutability can be taken into account when defining the market. A precondition to do so is that the effects of supply substitution are "equivalent to those of demand substitution in terms of effectiveness and immediacy"<sup>15</sup>.

The supply-side substitutability analyses whether suppliers are able to switch production to the relevant products and market them in the short term without incurring significant additional costs

<sup>12</sup> European Commission (1997), No. 2.

<sup>13</sup> European Commission (1997), No. 7.

<sup>14</sup> European Commission (1997), No. 15.

<sup>15</sup> European Commission (1997), No. 20.



or risks in response to small and permanent changes in relative prices.<sup>16</sup> The supply substitution is usually used if a product is unique in the eyes of the consumers, as for instance in the case of a tailor-made insurance. Since the additional production which is put on the market under these prerequisites has also a disciplinary effect on the competitive behaviour of the undertakings, the effects of demand and supply substitutability are equivalent.<sup>17</sup>

Besides product markets, competition authorities define the relevant geographic market, which is the area in which supply and demand of products is sufficiently homogeneous but different from those in neighbouring areas because the conditions of competition are appreciably different in those areas".<sup>18</sup> The concept of supply-side substitutability is more important to determine the relevant geographical market than the product market.<sup>19</sup>

## 1.2 Measuring Market Dominance

A dominant position means "a position of economic strength enjoyed by an undertaking, which enables it to (...) behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers".<sup>20</sup> In European competition law practice, the following three factors are taken into account when determining whether or not a dominant market position is present.

### 1.2.1 Market Shares

Market shares are considered a useful first indication. A high market share – above 50% according to the Court of Justice and the General Court - regularly indicates a dominant market position.<sup>21</sup> The EU-Commission considers a dominant position to be unlikely if market shares are below 40%.<sup>22</sup> Market share levels do not "mechanically or mathematically" lead to decisions on market dominance.<sup>23</sup> However, "the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of the existence of a dominant position".<sup>24</sup>

### 1.2.2 Market Entry or Expansion by Competitors

Given that competition is a dynamic process, "an undertaking can be deterred from increasing prices if expansion or market entry (of competitors) is likely, timely and sufficient".<sup>25</sup> A number of factors can prevent such expansion or market entry, such as economies of scale and scope, privileged access to essential inputs, network effects<sup>26</sup> or the need by competitors to undertake significant initial investments.<sup>27</sup>

### 1.2.3 Countervailing Buyer Power

Depending on their size or commercial significance for the dominant undertaking, customers may be in possession of countervailing buyer power. In that case, their ability to quickly switch to

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<sup>16</sup> European Commission (1997), No. 20.

<sup>17</sup> Ibid.

<sup>18</sup> European Commission (1997), No. 8.

<sup>19</sup> Friederiszick, H.W.

<sup>20</sup> European Commission (2009), No. 10.

<sup>21</sup> König/Schreiber, *Europäisches Wettbewerbsrecht*, 1. Aufl. 2010, S. 125 referring to EU case law.

<sup>22</sup> Commission Communication, No. 14.

<sup>23</sup> Mäger, in: Schulze/Zuleeg/Kadelbach, *Europarecht, Handbuch für die deutsche Rechtspraxis*, 3. Aufl. 2015, § 16 No. 86.

<sup>24</sup> European Commission (2009), No. 15.

<sup>25</sup> European Commission (2009), No. 16.

<sup>26</sup> European Commission (2009), No. 17.

<sup>27</sup> European Commission (2009), No. 17.

competing suppliers, to promote new entry or to vertically integrate (or to credibly threaten to do so)<sup>28</sup> may discipline suppliers with potential market power.

## 2 Markets in the Consumer Internet Industry

The consumer internet industry by itself is not a market. Rather, it is an industry bundling a large number of markets. In the following, we identify some of the consumer internet industry's most common markets for retail services and appliances. Obviously, this enumeration is neither exhaustive nor is it the result of a formal market definition exercise. Given that we thereafter introduce the wholesale markets for "data" and "access to consumers", we shortly explain the relevance of these wholesale markets for each of the retail markets.

### 2.1 Common Retail Markets for Services and Appliances<sup>29</sup>

**Market for Search Engines:** Search engines play a pivotal role in the consumer internet industry. They function as mediating platforms between producers and consumers of internet content. Defining the market for search engines is not trivial. Search engines may offer services concerning general web content (*e.g. Google, Bing or Yahoo*) or may be more or less specialised in offering a set of products (*e.g. Amazon's search machine*) or services (*e.g. hotel booking sites such as booking.com*).

*Relevance of wholesale markets:* Search engines operators need data (public and user specific data) as a wholesale input.

**Markets for Online Trading of Products and Services:** The consumer internet economy has led to the rise of platforms, enabling the buying and selling of products and services. These platforms may be specialised on certain services such as hotel accommodation or online dating or may accommodate the buying and selling all kinds of products.

*Relevance of wholesale markets:* In a way which is similar to search engines, online trading platforms gather data and make use of it as input. Online dating sites, social media networks (*e.g. Facebook or Youtube*) or distribution channels for tangible products (*e.g. Amazon and Ebay*) gain knowledge of highly personalised consumer data, which they can in turn - and to different degrees - use in order to improve the quality of their own services. At the same time they are in possession of a valuable access to the consumer, which they might make available on the wholesale market or use themselves to market products and services.

**Market for Billing & Payment:** Online traders typically outsource billing and payment services to specialised service providers (*e.g. paypal, click and buy*).

*Relevance of wholesale markets:* Given that these providers handle each and every billing order addressed to a customer, they are in a position to gain very detailed and high-quality data on consumers. They might make this information available on the wholesale market or use it themselves as an input to improve their services.

**Market for User Analytics:** Nowadays, almost every website in some way or another uses software to analyse users' behaviour. Specialised software allows tracking the source of website visitors, their geographical location, duration of visiting the website and much more. Website operators

<sup>28</sup> European Commission (2009), No. 18.

<sup>29</sup> Inspired in part by AT Kearney (2010), p. 7.

may have an incentive to allow the installation of such software as they can reasonably expect it to increase the likelihood of users finding their website via a search engine. Also, it allows for targeted marketing.

*Relevance of wholesale markets:* Actors on this market are likely to be in possession of valuable data on consumers. They might make this information available on the wholesale market (or use it themselves as an input).

**Market for Online Advertising:** The market for online advertising is highly technical, with a number of players specialised in different services at different levels of the value chain.

*Relevance of wholesale markets:* Obviously, suppliers of online advertising need data in order to target advertisements. The more one knows about certain users, the higher the added value (and hence also price) of any marketing effort will be. Market participants with such information are thus at a competitive edge compared to others. Also: In order to reach users at all, advertising needs a forum. Access to consumers is hence a relevant input in this market.

### **Markets for Hardware, Software, Operating Systems, Browsing and Apps**

*Relevance of wholesale markets:* Browser producers (e.g. Firefox, Safari and Chrome) are technically able to generate a considerable amount of data on the surfing behaviour of their users. The same goes for developers of software and/or apps. To different degrees, they might be able to use this data to improve their own product and/or to offer themselves as a platform for marketing. In order to be able to do so, they must first be in a position to offer their product to consumers altogether.

**Other Data Sensitive Markets:** Digitalisation has led to a growing number of services profiting from a data-led added value. The nature of these services is very diverse and may range from eHealth over smarthome applications to financial products.

*Relevance of wholesale markets:* A main characteristic of these services is the fact that high quality and individualised consumer data may particularly contribute to adding value to these services.

We expect the market for these data sensitive services to increasingly compete with traditional service providers. In a number of sectors, it is safe to expect suppliers in possession of high-quality data to have a significant competitive advantage vis-à-vis traditional service providers. This holds true in particular for services where the availability of individualised data lowers costs and risks for producers and hence also lowers prices for consumers. Examples of this are: smart home applications enabling energy saving or (non-)life insurances with insurance fees being dependent upon the insuree's behaviour or physical condition.

## **2.2 Novel Wholesale Markets: Data and Access to Consumers**

Besides these retail markets for services and appliances, we identify two wholesale markets for "Data" and for "Access to Consumers".

These markets are not end-user markets, but play an important role as inputs (wholesale markets) to some of the retail markets for services and appliances listed above. As will be elaborated below, many of the consumer internet industry's services cannot be produced or distributed without sufficient data or access to consumers. Alternatively, the cost of production and/or distribution dramatically rises if appropriate data or access is not given.

Although we treat both markets for “data” and for “access to consumers” as wholesale input markets to digital services and appliances, it should be stressed that digital services and appliances at the same time “produce” this data and (to a smaller extent) access to consumers as a by-output.

The exact definition of markets for “data” and for “access to consumers” is not rigid, but depends on the case under investigation. We identify three relevant criteria for defining these markets in any given case:

- **Technical conditions:** Depending on the retail market under investigation, “data” and “access to consumers” is relevant in very different technical aspects. As an example, for the retail search engine market, the relevance of the wholesale data market consists of activities such as crawling and access to context specific data. Looking at the retail app-market, “access to consumers” may boil down to being able to access distribution platforms such as app-stores at acceptable conditions.
- **Define the relevant product market:** By using methods such as the SSNIP-test on any wholesale market for data or for access to consumers which has been technically narrowed, all those products and/or services should be identified, which are regarded as interchangeable or substitutable. Hence, alternatives to crawling, context specific data or app-store access may be identified which are part of the same context-specific wholesale markets for data or access to consumers.
- **Define the relevant geographic market:** An area should be defined, in which supply and demand of products on the wholesale markets for data and access to consumers is sufficiently homogeneous but different from those in neighbouring areas. Given borderless communication in the digital economy, the relevant geographical market for wholesale data and access to consumers will most likely be the entire European Union.

### 2.2.1 Data

In a number of markets of the consumer internet industry, data is decisive in order to be able to offer a competitive service. When such data is available to only a few enterprises or available to others only at costs exceeding those of competitors, fair competition may be hindered. In economic terms, data may be a “bottleneck”. In legal terms, we speak of an “essential facility”.

In most cases, there are a number of factors which contribute to service providers being able to gain a dominant position on any given digital retail market. We do not claim data to be the sole or most important one. Also, data is not equally important and not equally scarce in all markets of the consumer internet industry. However, depending on the case, it may be a decisive bottleneck.

In the following, using the example of search engines, we explain the role of data as a “simple” wholesale input and explain how data can be both a by-output and a wholesale input at the same time. Especially the latter may lead to competition challenges, which are dealt with further below.

#### 2.2.1.1 Data as Wholesale Input

Public data is available on the World Wide Web and is especially relevant to search engines. By a technical activity called “crawling”, search engines “index” websites in order to list them in their search results. Unlike the term “public” indicates, this data is scarce and not available to all search engines.

The reason for this lays in the fact that operators of websites have an incentive to allow only the

web crawlers of the most popular search engines to index their sites.<sup>30</sup> This is so as crawling occupies server capacity, the provision of which is costly. Search engines which are able to carry out crawling and which are not blocked by website operators are able to gather a large amount of data, enabling them to build a better search engine than competitors can.

Hence, crawling public data is a bottleneck and may make it very difficult for competitors to challenge the market power of existing search engine operators.<sup>31</sup>

In economic terms, there is a platform-led tendency for website operators to supply an arguably “essential information” to one (or very few) search engines only. This may impede contestability on the retail search engine market.

### 2.2.1.2 Data as Downstream Output and Wholesale Input

A high number of digital services generate data when being used. This “context specific data” can serve as an input to production, improving quality of service and making user interaction more efficient.<sup>32</sup>

Context specific data may be provided by users themselves, e.g. as search queries in search engines, hotel booking sites or online distribution channels<sup>33</sup>. Search engine providers make use of a user's past searching behaviour to further improve the perceived quality of search service. In a similar way, this is valid for hotel booking sites or for distribution sites such as Amazon. They analyse consumers' past purchasing behaviour to identify individual preferences. This enables them to better target individual offers and makes the platform more interesting for users.

At the same time, platforms with a high number of users are more interesting for advertising. Hence, platforms which are up and running are able to produce “context specific data” as an output. The use of this further improves their quality, number of users and, as a consequence, their ability to monetarise the use of the platform. In sum, this decreases contestability on the market.<sup>34</sup> The fact that users are currently not able to transfer their “context specific data” to another service provider aggravates this.

The figure below illustrates this interaction between data as input and data as output. While (1) providing a service, a provider generates (2) data as an output. In the next step (3), this data is used in order to improve the quality of the service offered. As a consequence, market power may increase or may arise in the first place.

As will be discussed further below, this data can also be used as a wholesale input in retail markets which are totally unrelated to those having produced the data. Having sufficient data input, e.g. as a result of activities on a number of retail markets, may then facilitate market entry on other markets. In cases where data can be seen as an essential input, this causes serious competition problems (see problem 1 on page 20).

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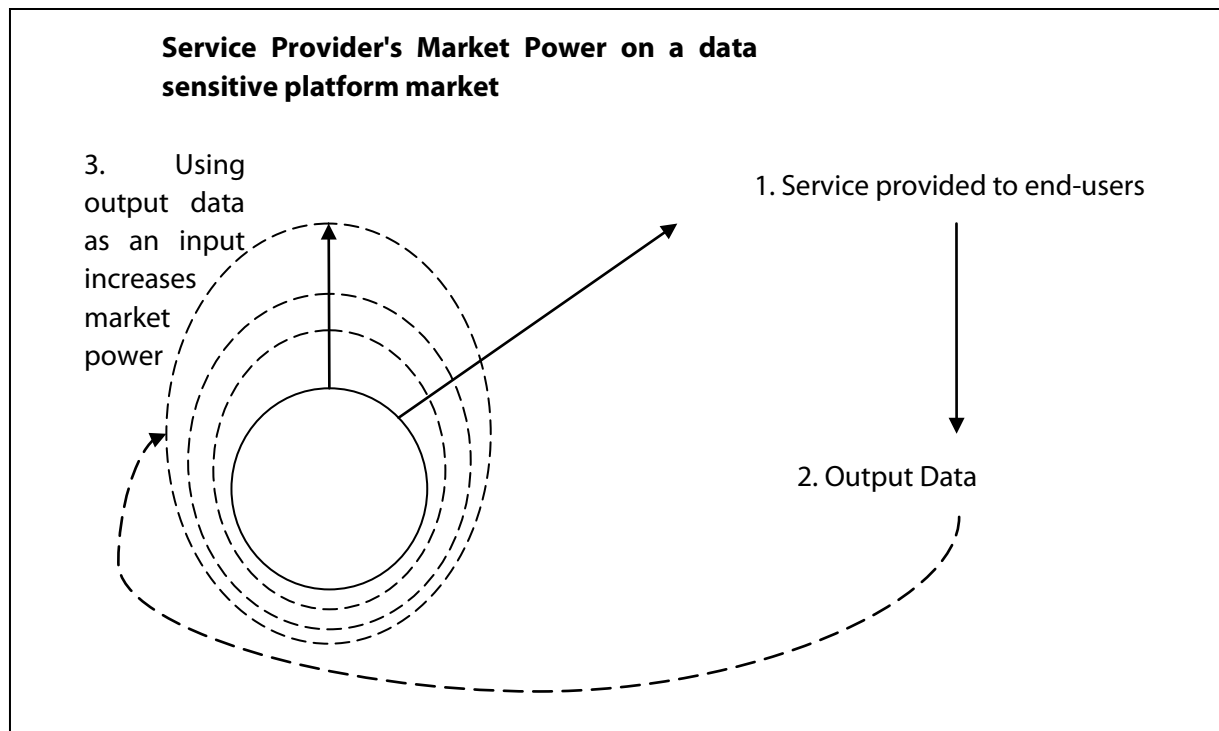
<sup>30</sup> Cf. from the point of view of content providers, Monopolkommission (2014), paragraph 230 - 231.

<sup>31</sup> Of course, any judgement on market power presupposes the definition of the relevant market. Looking at search engines, it is not obvious how such a market definition may look like. In particular, it is to be analysed whether specific search machines (such as hotel booking sites or sites such as Amazon) belong the same market as general search engines such as Google.

<sup>32</sup> Howard Shelanski (2013), p. 1680.

<sup>33</sup> Argenton and Prüfer (2011), pp. 3 - 4.

<sup>34</sup> Graef, Wahyuningtyas and Valcke (2015), p. 378.



**Figure 1: Data as Input and Output Factor**

### 2.2.2 Access to Consumers

Access to consumers plays a pivotal role in the consumer internet industry for two reasons. Firstly, retailers simply need to have access to consumers to be able to communicate their products and services. Secondly, access to consumers can be used as a manner to gather data. In this chapter we concentrate on the first aspect. For a discussion about data gathering see pages 10 et seq.

Retailers that want to sell a good or service to consumers via the internet need to get in contact with consumers. The more consumers they have contact to, the greater the probability to sell. Therefore, retailers often buy access to consumers from companies that already have access to a broad range of them. Hence “providing access to consumers” is a service that retailers demand while other companies offer that service.

In the consumer internet industry there are several ways to buy access to consumers. We here deal with three of the most relevant ones.

1. A common way is the use of a sales platform. As will be discussed in Chapter 3, platforms tend to lead to market concentration, given strong indirect externalities and high fixed costs. Hence sales-platforms with many consumers, such as Amazon or Ebay, can provide access to a broad range of consumers. That service is one important reason why retailers are willing to pay fees for using a platform. In the mobile world, especially the owners of app stores can sell access to consumers, since companies wanting to distribute software rely on app stores. Of course, there are other ways of installing apps but most users use the pre-installed app store. Hence, companies that own an important app store can offer access to consumers while companies that want to distribute their software have to pay for having access to consumers.
2. A second way to buy access to consumers is online advertising. In this case, frequently visited websites e.g. search engines, sales platforms or news sites offer “access to

consumers". On the other side, retailers or companies that need access to consumers demand that service. In the mobile world, apps that are frequently used can provide access to consumers via advertising as well.

3. A third way to buy access to consumers is often used to distribute desktop-software. If companies want to distribute software to consumers they often try to tie the download of their software to a download of another product. An example of this is the distribution of McAfee's anti-virus software. In order to reach a high number of consumers, McAfee uses Adobe's access to Adobe by tying the download of its anti-virus Software "Scan Plus" to the update of Adobe's popular flash player. In practice this means, when consumers update Adobe's flash player they have to uncheck to download McAfee's Scan Plus. Otherwise the update of the flash player goes hand in hand with the installation of McAfee's Scan Plus.

All the examples mentioned above show the importance of having access to consumers as an input to distribution efforts.

### 3 Conclusion

Any assessment of an alleged anticompetitive behaviour depends on the definition of the relevant market. The consumer internet industry by itself is not a market. Rather, it is an industry consisting of (1) a number of retail markets for services and appliances and (2) wholesale markets for "Data" and for "Access to Consumers". "Data" and "Access to Consumers" have a double nature. They are a by-result of the consumption of retail services and at the same time serve as a wholesale input to these (or remote) retail markets.



## CHAPTER 3: Competition Challenges in the Consumer Internet Industry

Roughly speaking, European competition law can be violated either by inadmissible cartelisation or by abusing a dominant market position. In this chapter, we will first deal with the challenge of determining dominance on the consumer internet industry's markets, many of which show elements of platforms. Thereafter, we shortly explain the classical categories of market abuse. Applying this to the consumer internet industry, we identify three relevant problems of abusive behaviour related to the consumer internet industry's wholesale markets. At the end of this chapter, we identify differences in data protection law as a source of competitive distortion. The chapter closes with a summary of the four competitive problems related to the consumer internet industry's wholesale markets.

### 1 Platforms and Market Dominance

One specific feature of the consumer internet industry are platforms. Platforms are not a new phenomenon as they also play an important role in the brick and mortar retail business. The specific feature of the consumer internet industry is that platforms are ubiquitous. It is not a coincidence that the big four internet companies that are under scrutiny by the public are all platform operators.

#### 1.1 The Concept of two- and multi-sided Platforms

Platforms occur in various forms:

- **sales platforms** connect buyers and seller; these can be consumers and retailers (e.g. Amazon), tourists with private people offering lodging (e.g. Airbnb) or connect people looking for transportation with drivers (e.g. Uber),
- **search engines** connect users that search for online content and content suppliers as well as users and advertisers (e.g. Google or Bing),
- **social networks** connect users with each other and often also users with advertisers (e.g. Facebook or WhatsApp),
- **advertising platforms** connect advertisers and website owners that provide space for advertising (e.g. DoubleClick) or
- **operating systems** connect users and software developers (e.g. Android).

All these examples have in common that the platform acts as an intermediary to connect users, which may be private or professional. Therefore, one characteristic of platforms is that they help users "to get together in a way that generates value for these"<sup>35</sup> users. Platform owners may charge users for this service.

If all platform users belong to the same group, in other words, when platform users are homogenous, the platform is considered to be one-sided.<sup>36</sup> One example of this is a social network (without advertising). If the platform users belong to different groups e.g. consumers, retailers or

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<sup>35</sup> Evans D. (2009), p. 23.

<sup>36</sup> Monopolkommission (2014), paragraph 300.



advertisers it is a two- or multi-sided platform. One example of this is a social network with advertisers.

In the following we focus on two- or multisided platforms for two reasons: Firstly, most platforms in the consumer internet industry are at least two-sided.<sup>37</sup> Secondly, the competition problems that can arise with two- or multi-sided platforms are far more complex than those on one-sided platforms.

According to the OECD, a two- or multi-sided platform is characterised by three elements:<sup>38</sup>

1. There are at least two **heterogeneous user groups** who want to interact “and who rely on the platform to intermediate transaction between them.”<sup>39</sup>
2. There exist **indirect externalities** (also called network effects) across the user groups. Indirect network effects mean that the benefit a user at one side of the platform realises “increases with the number of users on the other side.”<sup>40</sup>
3. The added-value the platform generates depends on the price level and the **price structure**. The price level is the price charged per transaction on both sides of the platform.<sup>41</sup> The price structure is the allocation of the price level between both groups.

The first element – the existence of two different user groups – is straight-forward at first sight. However, it might be difficult to detect the platform, for example in the case of operating systems. An operating system is a platform that connects application developers and application users as it facilitates the developing of an app.

The second element – the indirect externalities – is one reason why there are often only a few platforms that provide a certain service. In the case of operating systems the indirect externality is obvious: If the amount of users of a certain operating system increases, it becomes more attractive for application developers to develop an app that uses that operating system. This example already gives a first impression of the competition problems that might arise from multi-sided platform, because it is obvious that due to the network externalities there is only room for a few operating systems in the market.

The third element – the influence of price structure – has its roots in the fact that the groups that use a specific platform often differ in their price sensitivity. As a platform needs both sides of a platform in order to be successful, the platform operator attracts the group with the greater price sensitivity by charging this group less. In some cases, this price might even be zero, meaning the group with the lower price sensitivity subsidises the group with the greater price sensitivity. An example for the influence of the price structure provides the success of Adobe PDF-format. This format has been of little success until the price for the PDF-reader (the market side of those reading, not of those making PDFs) was reduced to zero.

## 1.2 Platforms and Concentration

When looking at platforms, we regularly observe a high market concentration with one platform having a very high market share (e.g. Google, Facebook, Amazon). Of course, there may be cases, where the platform owner has simply developed an innovative product or service that makes the

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<sup>37</sup> Evans D. (2009), p. 23.

<sup>38</sup> OECD (2011), p. 3.

<sup>39</sup> Id.

<sup>40</sup> Id.

<sup>41</sup> Evans D. (2009), p. 28.

platform worth using for all market sides. Nevertheless, there are three explanations for this platform concentration trend. Separately or combined, they can form insurmountable obstacles for potential competitors to an existing platform.

- **Indirect network effects:** Every additional user on one market side attracts additional users on the other market side. This again reinforces attractiveness to users on the first market side and so on. These effects are particularly relevant for sales platforms and social networks. Looking at search engines, they are not very relevant for retail consumers as they usually value additional advertisement as an inferior good. On the other side of the search engine market, the advertisement industry highly values these externalities, because a larger pool of search engine users makes advertising more attractive.
- **High fixed costs:** Building a platform causes high fixed costs, while variable costs of running a platform are mostly low. This leads to high market entry barriers for competitors. The platform may hence become a natural monopoly as it is not worthwhile to duplicate it. The platform's output is less costly to produce by one platform operator than by two or more competing platform providers.
- **Lock-in effect:** Lock-in effects exist if it is costly for users of a platform to switch to another platform. This may be the case as one loses digital private contacts (in case of switching social networks) or contact to retail traders (which may not be active on another sales platform). The same goes for the switching of sales platform by retail traders. Especially when the competing platform is small, there is a risk of not having sufficient contact to potential customers. Lock-in effects are relevant for social networks. However, their impact may also not be underestimated for the search engine market, as context-specific data improves the perceived quality of search engines for each and every user.

While these three forces foster platform concentration, there are other forces that have the opposite effect:

- **Multi-Homing:** Multi-homing means that platform users use several platforms simultaneously. This may reduce concentration tendencies only when *all* user groups are able to conduct multi-homing. If only one group, e.g. consumers, have the possibility to use more than one platform at the same time, while the other user group (e.g. retailers) cannot, the consumers have no incentive to switch to another platform. In practice, these hurdles for retailers can arise from limits to transferring positive user ratings to new platforms.<sup>42</sup> In the case of mobile operating systems, especially users face high costs of multi-homing.
- **Product Differentiation:** Platforms may differentiate the quality of their products, depending on the differences amongst users' preferences. Product differentiation may be horizontal (different product in one given quality) or vertical (one product in different qualities). Product differentiation reduces search cost for platform users and increases the possibility to find the right match. Therefore platform concentration may be reduced. However, too much product differentiation (which is possible only given great differences amongst users' preference) might be counterproductive as it limits competition between platforms.<sup>43</sup>

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<sup>42</sup> Monopolkommission (2014), paragraph 380.

<sup>43</sup> Monopolkommission (2014), paragraph 48.

- **User and Capacity Constraints:** User constraints may counteract platform concentration. In an attempt to lower negative externalities such as search and transaction costs for users.<sup>44,45</sup> In the consumer internet industry, constraints are common for advertising, as space for advertising is limited on websites. This leaves room for competition on other platforms.
- **Innovation:** Innovation can mitigate concentration of platforms.<sup>46</sup> The consumer internet industry is a dynamic and innovative industry. Its markets are characterised by short product lifecycles and regularly changing consumer preferences. New platforms picking up new products and services increase competition pressure.

### 1.3 Platform and Market Power

In order to determine the market power of a platform one has to determine the relevant market in the first place. To determine whether a product or geographical region is part of the relevant market one has to look at substitution in supply or demand.<sup>47</sup> Usually the SSNIP-Test is used to determine the relevant market. In the case of a multi-sided platform the result can be misleading for three reasons:

- The SSNIP-Test takes into account only changes in supply or demand on one side of the platform. On a multi-sided platform, an increase in the price for one group can have an effect on the other group. Hence, determining the relevant market is possible only when taking into account these effects on all sides of the platform.<sup>48</sup>
- The SSNIP-test can be conducted only when positive prices exist. However, a number of platforms in the consumer internet industry (and elsewhere) do not charge users on one side of the platform, for instance due to high price sensitivity. An increase in the price by 5 to 10% using the SSNIP-test can hence not be simulated.
- The SSNIP-Text is static; it may not be able to sufficiently cope with blurring and constantly changing boundaries of the different markets.<sup>49</sup>

Once the relevant market has been determined, the market power of a platform should be examined. According to the European Commission, an undertaking has a significant market power if it is able "to prevent effective competition being maintained on a relevant market, by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers"<sup>50</sup>. This is usually the case if an undertaking is able to raise the price above marginal costs.<sup>51</sup> In the case of platforms however, this could be misleading. Due to the different price structure for user groups, a high price for one user group is not necessarily a sign for a significant market power. It might be necessary in order to attract a price sensitive user group in the first place.

The same applies to the calculation of market shares. A platform can have a considerable market share on one side of the platform. This does however not suffice to conclude that the platform has

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<sup>44</sup> A common example are dating sites which want to avoid high heterogeneity amongst users, as this is said to increase search costs.

<sup>45</sup> Evans D. (2009), p. 34.

<sup>46</sup> Monopolkommission (2014), paragraph 51.

<sup>47</sup> For a detailed description of the determination of the relevant market, see page 6.

<sup>48</sup> Lapo Filistrucchi (2008).

<sup>49</sup> Van Gorp and Batura (2015), p. 52.

<sup>50</sup> European Commission (2009), p. 7.

<sup>51</sup> Evans D. (2009), p. 35.

a significant market power, because on the other side of the platform it might have only a relatively small market share.<sup>52</sup> Hence, one has to take into account all sides of the platform as well as the indirect externalities in order to determine the market power of a platform.

At the moment, there is no standard method for analysing market power on two (or more) sided markets.<sup>53</sup> The SSNIP-test is being adapted, in an attempt to take account of the mentioned problems and incorporate repercussions on total profitability of the firm or on the demand elasticity.<sup>54</sup> Van Gorp and Batura propose an alternative path. Instead of primarily searching for potential substitutes for a monopoly product to define the relevant market, they suggest taking a closer look at “business models”. Especially, the way how dominant companies of the consumer internet industry “generate turnover and profit” and whom they “steal away profits” ought to be focused.<sup>55</sup>

## 2 Abusive Behaviour and the Consumer Internet Industry

### 2.1 The Concept of Abusive Behaviour

European competition law practice generally provides for five types of actions, which are seen as abuses of a dominant market position.

#### 2.1.1 Limiting Production, Markets or Technical Development to the Prejudice of Consumers<sup>56</sup>

Actions limiting production, markets or technical development form the bulk of inadmissible behaviour. They cover typical monopolistic behaviour of suboptimally low output in combination with suboptimally high prices. Given that proving such behaviour is possible only in exceptional cases, competition practice has focussed on enterprises limiting sales, production or access to inputs vis-à-vis other market participants. This type of behaviour by the market dominant enterprise may limit or prohibit production by competitors.

#### 2.1.2 Tying and Bundling<sup>57</sup>

Tying is given where customers buying one product (the tying product) from an undertaking with a dominant position on the market for that product must also buy another product (the tied product).<sup>58</sup> The tying can take place on a technical or contractual basis.<sup>59</sup>

Bundling refers to the way products are offered and priced by a dominant undertaking and can take two forms:<sup>60</sup> Pure bundling is given where products are only sold jointly in fixed proportions.<sup>61</sup> Mixed bundling, often referred to as a multi-product rebate, is given where products can also be bought separately, but the sum of their prices is higher than the bundled price.<sup>62</sup>

<sup>52</sup> Monopolkommission (2014), paragraph 56.

<sup>53</sup> Ralf Dewenter, Jürgen Rösch und Anna Terschüren (2014).

<sup>54</sup> Lapo Filistrucchi (2008).

<sup>55</sup> Van Gorp and Batura (2015), p. 56.

<sup>56</sup> Article 102 (2) (b) TFEU.

<sup>57</sup> Article 102 (2) (d) TFEU.

<sup>58</sup> European Commission (2009), paragraph 48 in conjunction with footnote 3 to paragraph 50.

<sup>59</sup> European Commission (2009), paragraph 48.

<sup>60</sup> Ibid.

<sup>61</sup> Ibid.

<sup>62</sup> Ibid.

### 2.1.3 Unfair Prices and Trading Conditions<sup>63</sup>

Directly or indirectly imposing unfair prices or trading conditions covers cases of "inappropriate prices", in which enterprises abuse their market dominance by setting prices which are disproportionate to the economic value of the service they provide.<sup>64</sup> Indications for such behaviour are large price differences between "comparable markets".

This type of behaviour also covers margin squeezing, i.e. a situation where a vertically integrated dominant undertaking sets its pricing policy on upstream and downstream markets in such a way, that competitors have no economic opportunity to successfully compete on the downstream market.<sup>65</sup>

### 2.1.4 Discrimination<sup>66</sup>

Discrimination, i.e. applying dissimilar conditions to equivalent transactions with other trading parties, may place some parties at a competitive disadvantage. This type of actions covers price discrimination by market dominant enterprises. In demanding trading partners to pay different prices for similar products or services, dominant enterprises may attempt to divide or split markets. Such behaviour hinders competition on downstream markets.

### 2.1.5 Exclusive Dealing

This group of cases typically covers exclusive supply or purchase obligations. Although these do come with a certain number of advantages (regarding planning), they cause competition problems when issued by market dominant enterprises. The result may be that the competitors of a market dominant enterprise are excluded from supplying products to the latter's customers.

## 2.2 Three Problems of Abusive Behaviour in the Consumer Internet Industry

The table below uses a number of hypothetical examples to illustrate the most relevant types of abusive behaviour in the consumer internet industry's **wholesale markets for data and access to consumers**.

Spread over the five types of abusive behaviour mentioned above, we identify three sorts of problems. The first two problems are essentially transfers of market dominance from the wholesale markets for data and access to consumers towards digital retail markets (problem 1) as well as the other way around (problem 2). This transfer takes place either by limiting production, markets or technical development (problem 1) or by tying/bundling (problem 2). Problem 3 covers discrimination, unfair prices or trading conditions and exclusive dealing. It is however more static and deals with abusive behaviour on the wholesale markets for data and access to consumers only.

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<sup>63</sup> Article 102 (2) (a) TFEU.

<sup>64</sup> ECJ, Judgment in *Der Grüne Punkt Bronner*, C-385/07, ECLI:EU:C: 2009:456, Paragraph 142.

<sup>65</sup> Weiß, in: Calliess/Ruffert, EUV AEUV, Kommentar, 4. Auflage 2011, Beck-Verlag München, Article 102, paragraph 44.

<sup>66</sup> Article 102 (2) (c) TFEU.

### Problem 1: Denial of Access

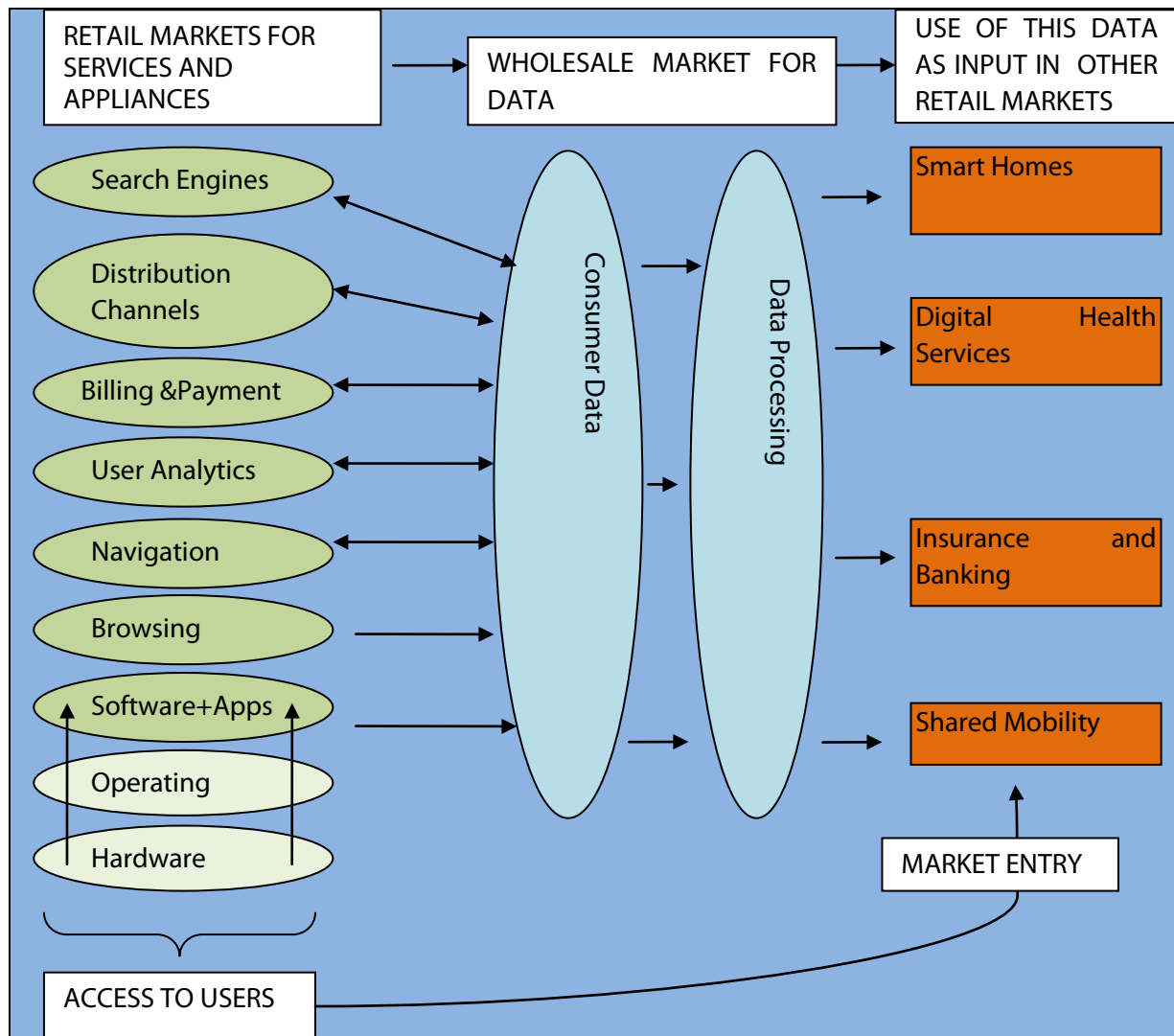
This problem covers abuse of an existing market dominance in markets for data and/or access to consumers by an enterprise which

- is vertically integrated,
- is in position of data and/or access to consumers which are an essential input to a service further down the value chain and which
- refuses to grant competitors access to these essential inputs.

The enterprise hence transfers market dominance to downstream retail markets by a refusal to deal, i.e. a denial to grant competitors access to the essential facility (*see table 1, Problem 1*).

As illustrated in Figure 2 below, we identify two special features of denial of access to wholesale markets for data and for access to consumers in the consumer internet industry.

- Firstly, an enterprise may be market dominant on the wholesale markets for data and/or access to users although it has no market dominance on any of the retail markets. For example, an enterprise may be active on the retail markets for search engines, distribution channels and browsing only and may not have a market dominant position on any of these markets. However, its activities on each of these three retail markets may enable it to gather a considerable amount of data. This data, originating from three sources may gain even more added value when combined and processed and may result in a dominant position on the wholesale market for data and/or access to users.
- Secondly, data and access to consumers are very versatile wholesale inputs. They may be used as inputs both on the original retail markets (on which they were originally produced) as well as on retail markets which are very remote from the original one. For example, the enterprise active on the retail markets for search engines, distribution channels and browsing may use the data gathered as an input to insurance and banking activities.



**Figure 2: Problem 1 - Using Data and Access to Consumers to Transfer Dominance**

**2.2.2 Problem 2: Tying and Bundling**

This problem is one of abusing existing market dominance in digital retail markets in order to gain dominance on the wholesale market for data or access to consumers. Enterprises may attempt to transfer this market power to markets for data and/or access to consumers by bundling and/or tying, i.e.: They supply a monopolistic product/service only when the customers at the same time purchases/receives a service which strengthens market power on the market for data and/or access to consumers (see table 1, Problem 2).

**Vertical vs. Horizontal Integration: Things get Blurry**

Problems 1 and 2 deal with the transfer of market power. Such transfers have often been seen as either vertical (i.e. along the value chain) or horizontal (between value chains). Vertical integration is the process of internalising different value chains within one firm. This can happen simply either through internal growth or by a merger. It can happen downstream - i.e. a company producing a wholesale product now also produces the final product - as well as upstream - i.e. a company usually producing the final good and externally purchasing wholesale products now takes over the production of that wholesale good.

Numerous economists have analysed why vertical integration is pursued and have analysed the benefits and disadvantages of it, not only on the level of the specific company pursuing such strategy, but also for the society and for economic welfare.

Considering the growing importance of data and access to consumers to almost all value chains in the consumer internet industry, the common distinction between horizontal and vertical integration loses a great deal of its explanatory power.

Indeed, data and access to consumers may be able to link markets which were hitherto not linked to one another at all. Data and access to consumers may be strengthened by activity on a certain market, and subsequently used as an important input for activity on another, entirely different market. Hence, what has been seen as horizontal integration until now may in future be seen as vertical integration.

**2.2.3 Problem 3: Market Abuse within Markets for Data and Access to Consumers**

Abuse of market dominance in markets for data or for access to consumers by an enterprise which is not vertically integrated, i.e. the enterprise does not offer any services further down the value chain which use data of access to consumers as an input to production (see *table types 3 - 5*).



Type of abusive behaviour	Random examples of abusive behaviour by enterprises in the consumer internet industry <u>emanating from or aiming at a dominant market position on markets for data or access to consumers</u>			
1. Limiting production, markets or technical development	Problem 1: An enterprise with a <b>dominant</b> position in the wholesale markets for <b>data and/or access to consumers</b> is vertically integrated and data/access to consumers as an <b>essential facility</b> for downstream retail markets. The dominant enterprise refuses access to data/access to consumers in order to Transfer Market Power toward retail markets.			
	<u>Abusing dominance in the wholesale data market</u>		<u>Abusing dominance in the wholesale market for access to consumers</u>	
	1.1 A dominant crawler makes exclusive use of his data to develop and improve a search engine.	1.2 A search engine operator makes use of his dominant position in markets for data and/or access to consumers to become active in the market for health insurance.	1.3 A sales platform makes use of his dominant access to consumers to start activities in the market for video on demand services.	1.4 The operator of a sales platform for Apps makes use of his dominant access to consumers to refuse distribution and selling of an App as it interferes with the operators activities on a certain market (e.g. advertising).
2. Tying and Bundling	Problem 2: Using <b>Tying/Bundling</b> , an enterprise with to <b>dominant</b> position in digital <b>retail markets</b> attempts to transfer market power to wholesale markets for data and access to consumers.			
	2.1 A dominant mobile hardware manufacturer pre-installs data-gathering apps on his products, which cannot be deleted.		2.2 A dominant video platform operator enables the use of certain services on the platform only for users of his (non-market dominant) social network platform.	
	<u>Problem 3: Abuse of market dominance within wholesale markets</u> for data of for access to consumers by an enterprise which is not vertically integrated.			
3. Unfair Prices	3.1 An operator of a sales platform abuses <u>dominance in the market for access to consumers</u> by demanding merchants to pay unproportionally high prices for access to the platform.			
4. Discrimination	3.2 An operator of a sales platform for apps abuses <u>dominance in the access to consumers market</u> by pricing differently the distribution and selling of an App, depending on the manufacturer of the app			
5. Exclusive Dealing	3.3 The operator of a sales platform makes use of his <u>dominance in data or in access to users</u> by prohibiting merchants to offer their products on other platforms.			

**Table 1: Abusive Behaviour in Data and Access to Consumers Markets of the Consumer Internet Industry**

### 3 (Un)level Playing Field for Data Processing

#### 3.1 Introduction: The General Data Protection Regulation

At the end of December 2015, the European Parliament, Council and EU-Commission reached a political agreement on the new general data protection regulation (GDPR). A formal adoption of the GDPR is expected in Spring 2016. The GDPR is expected to come into force by 2018 and will replace the existing EU Data Protection Directive (DPD)<sup>67</sup>.

The EU-Commission's proposal for the GDPR dates back to January 25th 2012<sup>68</sup>. The EU-Commission proposed an EU-Regulation on the protection of individuals with regard to the processing of personal data and on the free movement of such. One of the main aims of the regulation – which will be directly applicable in all EU Member States – is to reach fully harmonised rules on data gathering and processing throughout the EU. The existing data protection foots on the EU Data Protection Directive, which has caused significant differences throughout the EU, given different national transposition.

In the following, we focus on the rules governing transfer of data to third countries, as these are particularly important for the sake of this study.

#### 3.2 The Principle: Third Country Transfers only upon adequate Level of Protection

In order to prevent circumvention of the intra-European level of data protection, personal data may by Art. 25 para. 1 DPD only be sent to a third country, if this offers an “adequate level of protection” in terms of protection of the privacy and the freedoms and fundamental rights of individuals. Accordingly, the GDPR in Art. 40 sentence 1 sets out the general principle that any transfer of personal data to third countries must respect the provisions on international data transmission as well as the other provisions of the GDPR. This is to ensure that the level of protection of the GDPR is respected also upon international data transfers.

##### 3.2.1 Adequacy Decisions by the EU-Commission

The EU-Commission decides with an “adequacy decision” (according to Art. 41 para. 3 GDPR and Art. 25 par. 6 DPD) whether a third country ensures an adequate level of data protection. The Commission may decide so when, having comprehensively examined all relevant circumstances, it concludes that the third country does so by its national legislation or by international obligations. In the future, Art. 41 GDPR entails an number of detailed, but non-exhaustive checkpoints that must be taken into account by the Commission when assessing the level of data protection.<sup>69</sup>

A positive adequacy decision by the Commission binds Member States and enables the transfer of personal data in (parts of) the third country affected without “specific authorisation”<sup>70</sup>. Based on the DPD the Commission has recognised the level of data protection to be “adequate” in many countries such as Andorra, Argentina, Australia, Israel, Canada, New Zealand and Switzerland. These decisions remain valid also after the entry into force of the GDPR, as long as they are not

<sup>67</sup> Data Protection Directive 95/46/EC, as last amended through the Regulation (EC) No. 1882/2003.

<sup>68</sup> European Commission, Proposal COM (2012) 11 for a Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation).

<sup>69</sup> Amongst others, Art. 41 para. 2 GDPR now explicitly states that the Commission must assess the rule of law, the respect for human rights and fundamental freedoms in third countries and the relevant legislation. Also, the Commission must assess whether the subjects affected have effective and enforceable data subject rights and effective administrative and judicial redress and whether independent supervisory authorities exist and function effectively.

<sup>70</sup> Art. 41 para. 1 GDPR

amended by the Commission. With respect to the United States of America (USA), the Commission has, pursuant to art. 25 para. 6 of the DPD, adopted a special decision that is widely known as the "safe harbor" decision.

### 3.3 The USA as special Case: „Safe Harbor“

The lack of a uniform data protection law in the United States prevented the Commission from determining that the US as a country as a whole offers an "adequate level" of protection. Therefore, the Commission in 2000 has chosen the "safe harbor decision"<sup>71</sup> as an alternative solution.

#### 3.3.1 What is „Safe-Harbor“?

Unlike the other adequacy decisions in accordance with Art. 25 para. 6 DSD, in the "safe harbor" decision, the Commission recognised a system of self-certification and self-evaluation by American data receivers. It took an adequacy decision which is limited to the level of data protection by such certified businesses. US firms were free to join the so-called "safe harbor system" – in a voluntarily but binding way – by complying with the so-called "Safe Harbor Principles" and the accompanying implementation guidance in the form of "Frequently Asked Questions" (FAQ). These were presented by the US Department of Commerce and were incorporated by the Commission in its decision.

Hence, the transfer of personal data of EU citizens to the United States was only allowed to such certified companies who followed the principles and FAQ. Insofar, the Commission considered an adequate level of data protection to be given. The "safe harbor system" has been used by numerous small and large companies as legal basis for the transfer of personal data to the US.

#### 3.3.2 ECJ declares "Safe Harbor" invalid

In its "Schrems-Judgement" of 6 October 2015, the European Court of Justice has declared the safe harbor decision of the Commission invalid<sup>72</sup>. In its judgment, the Court largely followed the Opinion of Advocate General Yves Bot. In particular, the Court rebuked the following defects of the safe harbor system:

- (1) an insufficient examination and finding of "adequate protection" by the Commission,
- (2) the lack of limits concerning the infringement of basic rights,
- (3) the lack of effective judicial protection against such infringements and
- (4) the unlawful reduction of powers of national data protection authorities.

### 3.4 Current Situation

As of February 2016, the EU Commission and the US have politically agreed upon a new legal framework for transatlantic data transfers. On the basis of a so-called "EU-US Privacy Shield", European Commissioner Jourová and Commission Vice-President Ansip will now draft a new "adequacy decision". In the agreement, the USA agrees to submit the access to personal data of European citizens by US authorities for the purpose of law enforcement and national security to clear limits, warranties and monitoring mechanisms. Exceptions will be possible only to the extent necessary and proportionate. To end the deficit concerning legal protection of European citizens, a number of remedies will be introduced. Subjects affected will initially be able to file a complaint with the company concerned, which must respond within a certain time limit. EU Data Protection

<sup>71</sup> Decision 2000/520/EC

<sup>72</sup> ECJ, Judgement of 06.10.2015, C-362/14 Maximilian Schrems ./. Data Protection Commissioner, online at: <http://curia.europa.eu/juris/liste.jsf?language=en&num=C-362/14>.

Authorities will be able to refer complaints to the US Department of Commerce and the FTC. A cost-free alternative dispute resolution mechanism will be installed. Finally, a new Ombudsman will deal with complaints from EU citizens concerning access to data by US intelligence services. The operation of the new system will be reviewed annually.

### 3.5 Problem 4: Competitive Distortion due to Differences in Data Protection Law

Data is a very important input to many services in the consumer internet industry. In some cases, it may even be an essential input. Not only may data be available to a different extent to different players; which may hinder competition on downstream retail markets (see problem 1). Moreover, there is the additional risk that an unlevel playing field in data protection law causes a distortion of competition.

This problem is especially relevant for fair competition between European and US-American players of the consumer internet industry. Many of the main players of the consumer internet industry have origins and/or are based in the USA. Differences in data protection law between the EU and the USA have the potential to seriously distort competition. This is so, as data serves as an important wholesale input to a number of retail activities. Being subjected to less strict data protection rules would enable US-enterprises to use “better” data-inputs than EU-enterprises are able to.

It is hence necessary and correct that the new general data protection regulation does not allow for the export of personal data to third countries when this data is subject to local regulation, which is considerably less rigorous than the EU regulation.

## 4 Conclusion: Four Potential Competition Problems

**Problem 1 - Denial of Access:** As a consequence of their activities on a number of digital retail markets, enterprises may have a dominant position in the wholesale markets for data or access to consumers. If this data or access to consumers are essential wholesale inputs to activities on retail markets, the enterprises may have an incentive to refuse competitors access to these inputs if it is vertically integrated itself. This hinders competition on downstream markets and may lead to a transfer of market dominance from wholesale markets for data and access to consumer to (very different) retail markets.

**Problem 2 - Tying and Bundling:** Enterprises may bundle and/or tie retail products and services in an attempt to transfer market power from a retail market towards markets for data and/or access to consumers.

**Problem 3 - Market Power Abuse within Markets for Data and Access to Consumers:** Enterprises with market dominance in the markets for data or for access to consumers may abuse this dominance within these markets, i.e. absent any vertical integration.

**Problem 4 - Competitive Distortion due to Differences in Data Protection:** Differences in data protection law between the EU and the USA have the potential to seriously distort competition. This is so as data serves as an important wholesale input to a number of retail activities. Being subjected to less strict data protection rules would enable US-enterprises to use “better” data-inputs than EU-enterprises are able to.

## CHAPTER 4: How to deal with the four Competition Problems in the Consumer Internet Industry

Having defined the four competition problems related to the consumer internet industry's wholesale markets, this chapter first elaborates on the necessity and possibility to cope with abusive behaviour (problems 1 – 3). In an economic part, we first set out when a public intervention against such behaviour is necessary (and when not). We stress the importance of safeguarding incentives for investment and innovation, which is especially challenging given the intangible character of many of the consumer internet industry's innovations. Subsequently, we test in how far legal practice in the European Union is able to deal with each of these three types of abusive behaviour and whether sector specific regulation offers any advantages. We close by dealing with competitive distortion causes by differences in data protection law.

### 1 An Economic Guide

#### 1.1 The Challenge: Striking a Balance between Abuse of Market Dominance and Incentives to Invest and Innovate

Abuse of market power in a given market causes a number of economic challenges which generally cause disadvantages to customers. In the easiest textbook-case (here: Problem 3), a monopolistic supplier might have economic incentives to offer only a suboptimally low output and might do so at suboptimally high prices. The combination of both elements leads to a so-called "monopoly rent" which goes hand in hand with a decrease in consumer welfare.

On a more dynamic level, and especially in cases where the monopolistic product or service serves as an input for downstream products or services (here: Problem 1 and - to a lesser extent - Problem 2), the upstream monopoly may hinder innovation on the downstream markets. This may cause a number of downstream products or services not being offered at all in the first place.

As a counter-argument, it is regularly argued that monopolists may be the victims of their own success. Advocates of this view argue that monopolistic suppliers have often been offering products which became extremely popular due to their quality or innovative elements. They stress the importance of granting these entrepreneurs the possibility of reaping the benefits of their innovative and risky behaviour. Not doing so would have very adverse effects on the incentives to invest in potential future innovation. This reasoning holds true especially for risky investments which - ex-post - turned out to grant a very high return. Not allowing these new born monopolists to reap the benefits of the risks they entered into might negatively affect the future willingness to invest and innovate.

Striking the balance between fostering innovation and avoiding drawbacks for consumers and competition is not an easy thing to do. This holds true especially for the consumer internet industry, which is characterised by a high degree of innovation.

#### 1.2 The Easy Case: No Intervention given Contestability

From an economic point of view, public intervention against an abusive monopolist is necessary only when the monopolist is not contestable, i.e. when there is no prospect of any other market participant actually or potentially challenging the current monopolist.

Such actual competition or threat of potential competition will discipline the current monopolist, making an abuse of (actually existing!) market dominance highly unlikely. In such a case, there is no need for intervention by competition authorities or legislators.

Contestability is not given when barriers to market entry exist.<sup>73</sup> Barriers to entry may be manifold. Often they take the form of

- high sunk and fixed costs: Typically, new market players are faced with high costs for machinery, distribution, specialised personnel, etc. Some of these costs are sunk, i.e. they are not retrievable in case of a market exit.<sup>74</sup> Companies already active in the market do not have to carry the same costs anymore. In extreme cases, this may lead to natural monopolies.<sup>75</sup> Given a natural monopoly, the duplication of facility by the potential competitors is not economically viable or desirable. The reason for this may be that it is more cost efficient for one company to produce a good or service than for two or more undertakings to do so.
- technological barriers: In some cases, patents, licence or intellectual property rights hinder competitors to have access to the same technology as the monopolist has.

In plain words, theory tells us that the abuse of a market dominant position is just fine, as long as the existing market power is contestable. In that case, the actual occurrence of abuse will spur competitors to become active and will stop further abuse of market dominance.<sup>76</sup> The following box demonstrates how the EU has dealt in practice with non-contestable markets in the context of physical network infrastructures.

### **Applying Contestability: The European Regulation of Physical Network Infrastructures**

Since the late 1980s, the European Union has regulated access to physical telecommunication networks. The EU regulatory framework considers some copper networks to be essential facilities to phone and broadband services delivered downstream the value chain. A facility is considered to be essential if<sup>77</sup>

- (1) competitors are in need of it to reach retail customers and
- (2) it is not duplicable "with adequate means" by competitors.

That means that potential competitors on downstream markets are dependent on exactly that facility to gain access to the retail markets as there are no substitutes to it ("natural monopoly"). Hence, non-contestability on the upstream market for the essential facility is a pre-condition for regulated access.

#### **Box 1: Telco Regulation as Application of the Theory of Contestability**

<sup>73</sup> Stigler, G.J., (1968).

<sup>74</sup> Panzar, J.C., Willig, R.D. (1977).

<sup>75</sup> Knieps, G. (2008), p. 25.

<sup>76</sup> Given time-lags for these competitors to enter the market strengthens the case for intervention.

<sup>77</sup> Knieps, G. (2008), p. 103.

### 1.3 The Difficult Case: Conditions for Intervention in the Consumer Internet Industry given Innovation and Investment

The trade-off between market dominance and innovation gets more difficult when considering a dominant and non-contestable market position which has arisen following considerable innovation and/or risky investment efforts. There is an obvious trade-off between fostering innovation and risky investment on the one hand and protecting consumers against monopolistic prices on the other hand.

#### 1.3.1 Intangible Innovation in the Consumer Internet Industry

When considering this trade-off in the consumer internet industry, two features of the consumer internet industry deserve special mentioning:

- Innovation is enormously important in the consumer internet industry and should enjoy a high level of protection. “Innovation inevitably leaves some firms behind and may confer market power on the innovating firm. Yet (...) innovation greatly benefits consumers and should not be viewed as any more harmful to competition than when a firm cuts prices and thereby leaves its rivals without customers.”<sup>78</sup>
- In the consumer internet industry, bottlenecks/essential facilities are generally not of a physical nature, but are intangible assets, often protected by intellectual property rights<sup>79</sup>.

Examples of such essential facilities of an “intellectual property” type might be app stores, operating systems or online trading platforms (for having access to consumers) or search engines and other service providers (for data necessary to develop other services). Whether or not these facilities are really non-contestable “essential facilities” must be investigated on a case by case basis and cannot be answered here.

#### 1.3.2 Learning from the Past: Fostering Innovation despite Intervention

In traditional network access regulation, the trade-off between access regulation and fostering investment and innovation did not play an important role. This was so since most of these networks were newly liberalised former state monopolies whose infrastructure had been financed in the past by tax payers.

However, in recent years there have increasingly been attempts to foster risky investment in modern broadband networks. Legislators have tried to countervail free-riding by competitors demanding access to new networks only once uncertainty about sufficient demand by consumers has declined. Access prices to such networks include price add-ons, reflecting the risk entered into by the network investor.<sup>81</sup>

The latter idea is applicable to the consumer internet industry as well. The fact that essential facilities in the consumer internet industry tend to be intangible innovation (and not physical investment as is the case in telecommunications networks) does not make a significant difference. In both cases, risk is inherent, whereas risks and uncertainties associated with intangible innovation might often be even larger than the ones associated with physical investments. The latter typically

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<sup>78</sup> Howard Shelanski (2013), p. 1692.

<sup>79</sup> Van Gorp and Batura (2015), p. 32.

<sup>80</sup> Note: This list shall just indicate “potential” bottlenecks and it is not exhaustive. It shall by no means state that there are competitions issues in each and every case.

<sup>81</sup> European Commission (2010), Recital 25.



shows an investment risk concerning unknown future demand only. Intangible innovation entails this risk as well, but also faces additional uncertainties: It may be totally unclear, whether the investment leads to any marketable product or service at all.

Hence, in the consumer internet industry, given non-contestability of an upstream essential intangible asset (e.g. data or access to consumers), intervention in the form of an obligatory access to the essential facility should be possible. Legitimate concerns regarding innovation incentive can be met by including risks and uncertainties in the access price. Most likely, this will drive up access prices. As a likely result, competitors requiring access in order to merely copy the dominant enterprise's downstream services will not be able to finance the access as this will cause fierce price competition on the downstream market. We expect that only innovative downstream competitors will demand access. The added-value of their innovation will lead to a quality-competition on the downstream market with higher prices.

## 2 Coping with Problem 1: Denial of Access

### 2.1 Using Competition Law: The Essential Facilities Doctrine

“Data” and “Access to Consumers” may be necessary inputs to a number of services in the consumer internet industry. In Problem 1, privileged access to these inputs may be used to gain a dominant position in another market. We investigate in how far the essential facilities doctrine may be helpful in dealing with this type of behaviour.

#### 2.1.1 A Special Subset of Abuse of a Dominant Position

The “essential facilities doctrine” covers a specific type of behaviour, which is seen as an abuse of a dominant position. The general clause of Article 102 (1) TFEU states that any abuse of a dominant position shall be prohibited. To possess a dominant position is not in itself prohibited. However, the TFEU does not provide a definition of the concept of abuse but rather provides a (non-exhaustive) catalogue of examples of abusive behaviour. In particular, it states that abusive behaviour may consist in limiting production, markets or technical development to the prejudice of consumers.<sup>82</sup>

Over the years, the Commission, the Court of Justice (ECJ) and the General Court (EGC) have developed the “essential facilities doctrine”. It deals with cases of denial of access to so-called essential facilities by undertakings which are vertically integrated. It is a subset of “limiting production, markets or technical development”. Under certain conditions, denial of access may constitute an abusive exclusionary conduct according to Article 102 (2) (b) TFEU.<sup>83</sup> An essential facility can be a product, a service, an infrastructure like a harbour, a distribution system like a telecommunications network or an intellectual property like works protected by copyright or inventions protected by patents.<sup>84</sup>

#### 2.1.2 Balance between Intellectual Property Rights and Competition Law

In dealing with cases of essential facilities as intellectual property type, the ECJ and EGC consider the balance between intellectual property rights and competition law. They stipulate conditions

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<sup>82</sup> Article 102 (2) (b) TFEU.

<sup>83</sup> Koenig, Christian/Schreiber, Kristina, *Europäisches Wettbewerbsrecht*, Tübingen 2010, p. 144. However, the essential facilities doctrine is classified by some as a category of Article 102 (1) TFEU, for example by Immenga/Mestmäcker, *Wettbewerbsrecht Band 1: EU/Teil 1, Kommentar zum Europäischen Kartellrecht*, 5. Auflage 2012, C.H. Beck Verlag, München, Art. 82 EGV, paragraph 239.

<sup>84</sup> Mestmäcker/Schweitzer, *Europäisches Wettbewerbsrecht*, 3. Auflage 2014, § 19 paragraph 75.



which must be met for dominant undertakings to grant access to their intellectual property which serves as an essential facility.

On the one hand, intellectual property law aims at fostering innovation by granting exclusive rights to the rightholders. In this way, rightholders are in a position to monetarise their intellectual properties. This safeguard is essential to maintaining innovation incentives. Without subsequent protection, incentives to invest time and effort in risky innovations are heavily reduced.

On the other hand, competition law protects a genuine undistorted competition and aims at making a benefit for businesses and consumers.<sup>85</sup> Competition is necessary to create innovation pressure. The competition law encourages undertakings to increase their efficiency and innovation by prohibiting behaviour of undertakings that restricts competition.<sup>86</sup>

Hence, both intellectual property law and competition law pursue the same aim of fostering innovation and, thus consumer welfare. However, there is an obvious conflict between both, requiring a balancing of protecting the intellectual property right against protecting free competition. The question rises which of both rights is granted priority if the rights overlap.

The ECJ and EGC have given answers to this question for the first time in *Magill*, making clear that the denial of access to intellectual property by a rightholder can be an abusive behaviour according to Article 102 TFEU under **exceptional circumstances**.<sup>87</sup> In several cases, the ECJ and the EGC have dealt with the question of how to determine exceptional circumstances. Below, we give a short overview of the most relevant cases and list the four criteria which must be fulfilled for the denial of access to an essential intellectual facility to classify as an abuse of dominant position.

### 2.1.3 The Cases *Sealink I and II*, *Rødby*, *Magill*, *Bronner*, *IMS Health* and *Microsoft*

Increasingly, cases under the essential facilities doctrine deal with facilities which are no longer of a physical nature, but which are intangible. These cases are of special interest for the consumer internet industry, as data and access to consumers fall into this category. Below, we give a short overview of the most relevant cases.

#### 2.1.3.1 Essential Facilities of a Physical Type

The EU-Commission dealt with several cases relating to the denial of access to physical facilities. In the cases *Sealink*<sup>88</sup> and *I*<sup>89</sup> as well as in *Rødby*<sup>90</sup>, the owners and operators of harbours were vertically integrated, i.e. they also offered ferry services but denied access to the harbour to a competitor for ferry services. In this denial of access, the Commission saw an abuse of a dominant position according to Article 102 TFEU in all three cases.

#### 2.1.3.2 Essential Facilities of an Intellectual Properties Type

In *Magill*<sup>91</sup>, broadcasting companies refused to offer a publishing company information about their weekly television schedules. *Magill* needed this information to publish a weekly television guide. The broadcasting companies were vertically integrated, i.e. they published their own weekly

<sup>85</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, 2009/C 45/02; cf. Protocol No 27 on the internal market and competition, Official Journal 2007 No C 306, p. 156.

<sup>86</sup> Körber, Thorsten, *Recht der Internationalen Wirtschaft (RIW)* 2004, p. 881.

<sup>87</sup> ECJ, Judgment in *Magill*, C-241/91 P and C-242/91 P, ECLI:EU:C:1995:98, paragraph 50.

<sup>88</sup> Commission decision 11 June 1992, COMP/34174 – *Sealink/B&I – Holyhead*.

<sup>89</sup> Commission decision 21 December 1993, Official Journal 1994, No L 15/8 – *Sea Containers/Stena Sealink*.

<sup>90</sup> Commission decision 21 December 1993, Official Journal 1994 No 55/52 *Port of Rødby*.

<sup>91</sup> ECJ, Judgment in *Magill*, C-241/91 P and C-242/91 P, ECLI:EU:C:1995:98.

television guides (downstream market) covering only own programmes. There was no weekly television guide of all broadcasting companies available at that time. The ECJ saw an abuse of dominant position by the broadcasting companies on the market for weekly listings because weekly schedules (upstream market) are an essential input and denial of access to it eliminates all competition on that market.

In *Bronner*<sup>92</sup>, a press undertaking refused a competitor paid access to its nationwide delivery system. The press undertaking was vertically integrated on the downstream market for newspapers and the upstream market for newspaper distribution. Strictly speaking, therefore this case deals with the access to a service rather than to an intellectual property. The ECJ saw no abuse of a dominant position. In particular, it argued that the delivery system was not indispensable for distributing newspapers, given that there are alternative methods of distributing newspapers like sales at kiosks.

In *IMS Health*<sup>93</sup>, a vertically integrated undertaking both gathering (upstream market) and reporting (downstream market) data on regional sales of pharmaceutical products refused a competitor access (via a paid licence) to its copyright protected system. The system was the industry standard and clients refused the use of other systems. Hence, it was considered an essential input for becoming active on the downstream market. However, IMS Health's intellectual property deserved protection. Hence, access to the system should be obligatory only when the competitor offers a **“new product”** on the downstream market.

In *Microsoft*<sup>94</sup>, there was vertical integration by Microsoft on the (upstream) market for client PC operating systems and the (downstream) market for operating systems for work group servers. Microsoft denied other suppliers on the latter market access to interface information necessary for the adequate functioning of work group servers on client PCs. In this specific case, the EGC saw a necessity to protect Microsoft's intellectual property in principle but eased conditions for access by no longer making it dependent upon the offering of new products.

#### 2.1.4 Four Criteria to Define Exceptional Circumstances

The case law establishing criteria to define such exceptional circumstances is still evolving.<sup>95</sup> Exceptional circumstances, leading to an obligation to grant access to an “essential facility” which is an intellectual property right, are given, when the following four criteria are met.

(1) The use of the upstream facility must be **indispensable** to carrying on the downstream business, i.e. there must be no actual or potential substitute for the facility the competitor seeks access to.<sup>96</sup>

An actual substitute needs not be as “advantageous” as the facility itself.<sup>97</sup> A potential substitute is not given when there are technical, legal or even economic obstacles which make it impossible or unreasonably difficult for any other undertaking to establish its own facility.<sup>98</sup> Economic obstacles are not given for a small competitor arguing that the creation of a new facility is “not economically

<sup>92</sup> ECJ, Judgment in *Bronner*, C-7/97, ECLI:EU:C:1998:569.

<sup>93</sup> ECJ, Judgment in *IMS Health*, C-418/01, ECLI:EU:C:2004:257.

<sup>94</sup> EGC, Judgment in *Microsoft*, T-201/04, ECLI:EU:T:2007:289.

<sup>95</sup> Naue, *Immaterielle Gegenstände – insbesondere Immaterialgüterrechte – als wesentliche Einrichtungen nach Art. 102 AEUV*, in: Behrens/Wurmnest (Hrsg.), *Europäische Integration und Internationale Wirtschaftsbeziehungen, Rechtswissenschaftliche Studien*, Band 22, 2012, Peter Lang Internationaler Verlag der Wissenschaften, Frankfurt am Main p. 22.

<sup>96</sup> ECJ, Judgment in *Bronner*, C-7/97, ECLI:EU:C:1998:569, paragraph 41; ECJ, Judgment in *Magill*, C-241/91 P and C-242/91 P, ECLI:EU:C:1995:98, paragraph 52 f.

<sup>97</sup> ECJ, Judgment in *Bronner*, C-7/97, ECLI:EU:C:1998:569, paragraph 43.

<sup>98</sup> ECJ, Judgment in *Bronner*, C-7/97, ECLI:EU:C:1998:569, paragraph 44.

viable<sup>99</sup> to him, due to his size. Decisive is, whether the creation of a new facility is economically viable for a competitor that is “comparable” to the undertaking running the existing facility.<sup>100</sup> Moreover, possible losses in the short term do not make an investment “not economically viable”.<sup>101</sup> However, the EGC ruled in *Microsoft* that access must be granted “on an equal footing”.<sup>102</sup> This has been considered as a lowering of the indispensability criteria.<sup>103</sup> Since Microsoft did not appeal the EGC’s judgment, the ECJ was not able to clarify its position on the EGC’s modification of the indispensability criteria in its *Microsoft* judgment.

(2) The denial of access to the facility must be **likely to eliminate all competition in the downstream market**.<sup>104</sup>

In its *Microsoft* judgment, the EGC stated that there is no need to wait until there is (practically) no more competition on a market, because the objective of Article 102 TFEU is to maintain “undistorted competition”.<sup>105</sup> According to the EGC, this is all the more true, if the market concerned is characterised by significant network effects which make it difficult to reverse an elimination of competition.<sup>106</sup> Furthermore, effective competition does not exist on a specific market, if competitors of the dominant undertaking “retain a marginal presence in certain niches”.<sup>107</sup>

(3) The denial of access to a facility which is an **intellectual property** must prevent the appearance of a **new product or must limit technical development**.<sup>108,109</sup>

The new product criterion is not a general criterion of the essential facilities doctrine, but applies in cases where a (potential) competitor seeks access to a facility which is an intellectual property.<sup>110</sup> An access-seeker intending to essentially duplicate the existing product or service on the downstream market by the owner of a facility which is an intellectual property, must not be offered access. Access must be granted only given the intention to produce a new product for which there is a potential consumer demand.<sup>111</sup> However, in *Microsoft* the EGC ruled that it may be sufficient to investigate whether denial of access limits technical development<sup>112</sup>. This ruling is interpreted by some as a lowering of the new product criterion,<sup>113</sup> by others as a questioning of the new product criterion.<sup>114</sup>

(4) The denial of access to an essential facility may be justified by **objective reasons**.<sup>115</sup>

In its *Microsoft* judgment, for instance, the EGC discussed the question whether granting access could have a negative impact on Microsoft’s incentives to innovate.<sup>116</sup>

<sup>99</sup> ECJ, Judgment in Bronner, C-7/97, ECLI:EU:C:1998:569, paragraph 45.

<sup>100</sup> ECJ, Judgment in Bronner, C-7/97, ECLI:EU:C:1998:569, paragraph 46.

<sup>101</sup> Opinion of Advocate General Jacobs delivered on 28 May 1998 in Bronner, C-7/97, ECLI:EU:C:1998:569, paragraph 68.

<sup>102</sup> EGC, Judgment in Microsoft, T-201/04, ECLI:EU:T:2007:289, paragraph 421.

<sup>103</sup> Graef, Wahyuningtyas, Valcke (2015), pp. 375-387; Körber, Microsoft-Urteil des EuG, WuW 12/2007, S. 1209 (1217).

<sup>104</sup> ECJ, Judgment in Magill, C-241/91 P and C-242/91 P, ECLI:EU:C:1995:98, paragraph 56.

<sup>105</sup> EGC, Judgment in Microsoft, T-201/04, ECLI:EU:T:2007:289, paragraph 561.

<sup>106</sup> EGC, Judgment in Microsoft, T-201/04, ECLI:EU:T:2007:289, paragraph 562.

<sup>107</sup> EGC, Judgment in Microsoft, T-201/04, ECLI:EU:T:2007:289, paragraph 563.

<sup>108</sup> ECJ, Judgment in Magill, C-241/91 P and C-242/91 P, ECLI:EU:C:1995:98, paragraph 54.

<sup>109</sup> EGC, Judgment in Microsoft, T-201/04, ECLI:EU:T:2007:289, paragraph 647.

<sup>110</sup> Böttcher, „Clearstream“ – Die Fortschreibung der Essential Facilities-Doktrin im Europäischen Wettbewerbsrecht, Beiträge zum Transnationalen Wirtschaftsrecht, Heft 102, Januar 2011, p. 25.

<sup>111</sup> ECJ, Judgment in IMS Health, C-418/01, ECLI: EU: C:2004:257, paragraph 49.

<sup>112</sup> EGC, Judgment in Microsoft, T-201/04, ECLI:EU:T:2007:289, paragraph 647.

<sup>113</sup> Graef, Wahyuningtyas, Valcke (2015), p. 382.

<sup>114</sup> Körber, Microsoft-Urteil des EuG, WuW 12/2007, p. 1209 (1217).

<sup>115</sup> ECJ, Judgment in Magill, C-241/91 P and C-242/91 P, ECLI:EU:C:1995:98, paragraph 55.

<sup>116</sup> EGC, Judgment in Microsoft, T-201/04, ECLI:EU:T:2007:289, paragraph 696 et seq.

### 2.1.5 Application to the Consumer Internet Industry

Applying these four criteria to the search engine market gives the following image. In order to produce the retail service (search engine services) to consumers, there is a need to use a.o. the wholesale inputs stemming from the wholesale market for data. These may take the form of private data, improving search results. We here analyse public data gathered by web crawlers. When analysing whether an enterprise with dominance on the web crawler market has to grant competitors paid access to the results of its crawling, the following questions must be answered.

- (1) The first question is whether web crawlers are indispensable to producing a competitive search engine, whose quality of search results is sufficient to cause effective competition. In addition, it is to be verified whether substitutes are actually or potentially available. Given the economic incentives of website operators to allow only web crawling by the largest search engine operators, this might seem unlikely (at least within the market for web crawling).
- (2) Next, one has to analyse whether denial of access to crawling results is likely to eliminate competition in the downstream market. Seeing some competition in the retail market is not sufficient to answer that question. The EGC has implicitly stated that competition should be sustainable, i.e. there is no need to wait until there is (practically) no more competition on a market and competitors of the dominant undertaking should retain more than just a marginal presence in certain niches.
- (3) Third, we consider whether denial of access by the dominant crawler prevents the appearance of a new product or limits technical development. This is done to protect the innovation incentives by the dominant crawler. Currently, the exact scope of this criterion is rather unclear. Search engines focusing on protecting the privacy of their users or specialising on search dimensions like price comparison might well fulfill the criterion of technical development.
- (4) Fourth, the dominant crawler might justify denial of access by objective reasons, such as server capacity constraints.

## 2.2 Using Sector-Specific Regulation?

The essential facility doctrine in competition law shows great analogies with the economic problems in the telecommunications industry. However, the European Union has chosen to proceed with ex-ante sector regulation in this industry.

Applied to the wholesale markets of the consumer internet industry, this would mean that a dominant market player on a certain wholesale market for data or access to consumers would always (ex-ante) be obliged to offer paid access to his facilities at the benefit of downstream competitors. Whether or not the dominant market player abuses his position, is irrelevant.

In the following, we analyse the main advantages and disadvantages of sector specific regulation and investigate whether it is recommendable for the consumer internet industry.

### 2.2.1 Merits and Disadvantages of Sector-Specific Regulation

The main difference between competition law and sector-specific regulation is the precondition for intervention. An intervention by applying competition law is possible only against market dominant enterprises, which can be shown to have abused their market dominant position. Hence, competition law has an inherent **ex-post** character. Sector-specific regulation, on the contrary,

allows for intervention at an earlier stage. Typically, it subjects all enterprises with market dominance in certain pre-defined markets to certain pre-defined obligations (often: access to an essential facility), irrespective of whether they act abusively or not. Sector-specific regulation is hence intrinsically **ex-ante**.<sup>117</sup>

In the EU, ex-ante sector-specific regulation is typically enforced by specialised national regulatory authorities and not by competition authorities.<sup>118</sup> The most developed ex-ante sector-specific regulation system in the EU is arguably the regulation of the telecommunication sector. A detailed set of European Directives<sup>119</sup> sets out the preconditions, procedures and regulatory remedies which national regulatory authorities must apply. The EU-Commission is in possession of certain veto-powers against national action. This framework enables **swift** action.

The “ex-ante” approach has the advantage of being **clear and predictable and it reduces uncertainty** for both the dominant market player and its competitors. On the other hand, competition law always entails an assessment of the peculiarities of a single case. In that sense, the application of competition law is usually more precise and exact. However, having to assess each and every case takes time, which risks large delays in the imposition of supervisory measures, at the detriment of competition.<sup>120</sup>

“Ex-ante” regulation comes in before problems arise but is dependent upon relevant markets being pre-defined. It makes implicit assumptions on future market developments and the respective reactions of all (potential) market players. The “ex-post” concept, on the other hand, takes factual market information and data into account to judge whether a dominant undertaking exploits its market power. Hence, ex-ante regulation bears an **inherent risk of faulty and unnecessary regulation**. This goes especially when thinking about the trade-off discussed above between innovation and competition.

The framework for “ex-ante” regulation makes it fast, but also less “flexible” in its application. This brings about the risk of regulation being more persistent than ex-post control.<sup>121</sup> There is hence a **risk of over-regulation**.

Whatever way the authorities choose, there are two mistakes they may make. They may choose to regulate, although there is no need to do so. In this case, regulation would distort competition that actually functions (Type I Error). Or they may choose not to regulate, although there is a need to do so, because non-contestable market power is present. In this case, competition forces are too weak, prices too high and total output too low (Type II Error).<sup>122</sup>

## 2.2.2 Sector-Specific Regulation for the Consumer Internet Industry?

### 2.2.2.1 Rapid Innovations

The consumer internet industry is changing rapidly with a huge amount of disruptive technological evolutions. At first sight, this seems to speak in favour of ex-ante regulation and against ex-post

<sup>117</sup> Haucap and Kruse (2003), p. 1 and 2.

<sup>118</sup> In Germany, for instance, the Federal Network Agency (Bundesnetzagentur) is responsible for implementing regulatory measures a.o. in the field of telecommunication.

<sup>119</sup> Framework Directive (2002/21/EG), Access Directive (2002/19/EG), Authorisation Directive (2002/20/EG), Universal Service Directive (2002/22/EG) and Data Protection Directive (2002/58/EG).

<sup>120</sup> Van Roosebeke (2008), p. 14.

<sup>121</sup> Ibid., p. 3 and 4.

<sup>122</sup> Ibid., p. 12.

supervision via applying competition law, because the latter runs the risk of being irrelevant once a conclusion is drawn.<sup>123</sup>

However, there are at least two caveats to the ex-ante approach:

- **Innovation and Speed of Regulation:** The speed of the ex-ante approach might be present in innovative markets at first sight only. A swift reaction with ex-ante regulation is possible only within an established regulatory framework, where, for instance, market definition already has taken place. Rapid technological changes in the consumer internet industry make it likely that the regulatory framework needs a regular revision. Otherwise, the ex-ante framework may lack accuracy as it risks being overhauled by market changes. The timeline for such revision may be very different, depending on whether it is dealt with by the executive branch or by the legislative branch.<sup>124</sup>
- **Innovation and Scrutiny of Regulation:** The rapid pace of innovation in the consumer internet industry increases the need for ex-ante regulation to be constantly scrutinised. Each and every innovation may cease a facility respectively an "input of an intellectual property type" from being "essential", since substitutes may have arisen. Experience in the ex-ante telecommunication regulation shows a bias towards type I errors, with regulation remaining in place for too long. The ex-post supervisory approach limits the risk to make such error.

### 2.2.2.2 Versatile Wholesale Products

The main problem for applying ex-ante regulation in the consumer internet industry is the versatile nature of the wholesale markets for data and access to consumers. This is a fundamental difference with the regulated wholesale markets in the telecommunication sector whose practical use can be clearly linked to a very limited number of retail services.<sup>125</sup> In such cases only, it is possible to decide ex-ante on whether a certain facility is really "essential" and, hence, worthy of subjecting to access regulation.

In the consumer internet industry, this precondition is not fulfilled. Both data and access to consumers may be inputs to a high (and unknown) number of retail products and services, which may not be related to each other at all.<sup>126</sup> An ex-ante, universally valid decision of such a wholesale input being an "essential input" to whatever retail product or service is thus not feasible.

This means that for each and every retail product or service, the relevant wholesale market for data and access to consumers needs to be further concretised ex-ante, as these wholesale products are not homogeneous. Only having done so, and having affirmed that the concretised wholesale facility is truly essential to the specific retail product or service, an ex-ante regulation may be useful.

If at all, this seems feasible for a small number of retail products or services with a low degree of technological innovation only.

<sup>123</sup> Diker Vanberg (2012).

<sup>124</sup> In the European regulatory framework for Telecommunications, the EU Commission issues a market recommendation which pre-defines relevant markets. This recommendation is legally non-binding. However, it has a quasi-binding character for the national regulatory authorities. A review of this recommendation can take place without major delay. If, however, technological change makes a review of the scope of existing European regulations necessary, time delay are considerable, given that EU-Commission, Parliament and Council are involved in such a regulations overhaul.

<sup>125</sup> As an example, the wholesale market for access to the last mile - segment of telecommunication networks that is closest to the customer - is an essential input for being able to deliver telephone or broadband retail services.

<sup>126</sup> As an example, data may be an input in the "production process" of both life insurances and eHealth offers.



### 2.2.3 Access Price Regulation

Usually, if national regulatory authorities decide that access to a facility has to be granted, such access is not given free of charge. Instead, access seekers have to pay fees to the owner of an essential facility in order to cover the owner's costs.

National regulatory authorities responsible for ex-ante regulation have a high level of expertise in calculating adequate access prices. In doing so, they make use of a number of models in an attempt to incorporate all relevant costs of the essential facilities. These costs models vary from fully distributed costs (FDC) to long-run incremental costs (LRIC) models. FDC models allocate costs directly to the services that are responsible for their occurrence, accounting methods are being used and common costs are taken into account. LRIC models, on the contrary, focus on the marginal costs the provision of an additional increment induces. Either type of model can be applied "top-down" using accounting data (taking the costs of providing several services and then allocates these costs to the individual services, this leaves a great share of common costs) or bottom-up (uses a model instead that tries to calculate the costs of producing an incremental element with the most efficient means) and both can be based using historical costs (costs at the time of the facilities build-up) or current costs.<sup>127,128</sup>

This access price calculation will be of high relevance to the wholesale markets of data and access to consumers of the consumer internet industry. The challenge will be to adequately quantify and price innovative efforts and investment risk (see page 29).

### 2.2.4 Application to the Consumer Internet Industry

Data on consumers and access to consumers are potential wholesale bottlenecks to retail products and services in the consumer internet industry. Hence, there seems an obvious analogy to sector specific ex-ante regulation as exercised in the European telecommunication sector.

However, a number of particularities of the consumer internet industry speak against a broad application of ex-ante sector specific regulation in the consumer internet industry. In many cases, ex-post applying competition law is the preferable option.

- First, the innovative character of the consumer internet industry deprives the ex-ante regulation from its speed advantage as this makes regular changes to the regulatory framework necessary. Also, rapid innovation increases the (already inherent) risk of overregulation.
- Second, the consumer internet industry's wholesale markets are very versatile. Ex-ante regulation is possible only when retail and wholesale markets can be narrowly defined and essential input can be unambiguously detected on the wholesale level. As this is very time consuming and is at permanent risk to be outdated by technological change, it is conceivable for a small number of markets only.

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<sup>127</sup> Van Roosebeke (2012).

<sup>128</sup> Eric P. Chiang (2009).

### 3 Coping with Problem 2: Tying/Bundling

#### 3.1 Using Competition Law

Tying and bundling (below: "tying") are common practices aiming at providing customers with better products in more cost effective ways.<sup>129</sup> When assessing whether tying presents a breach of European competition law, the following criteria apply.

##### 3.1.1 Dominant Market Position

For tying to be an abuse, the undertaking must be dominant in the tying market, but not necessarily in the tied market.<sup>130</sup> In the case of bundling, the undertaking must be dominant in one of the bundled markets.<sup>131</sup>

##### 3.1.2 Distinct Products

Tying can be an abuse only if it is applied to distinct products.<sup>132</sup> Whether products are distinct or not depends on customer demand.<sup>133</sup> Two products are considered distinct if, without tying, a substantial part of customers would buy the tying product without buying the tied product from the same seller as well.<sup>134</sup> In the *Microsoft* case, for instance, the Windows client PC operating system and the Windows Media Player were considered distinct products.<sup>135</sup>

##### 3.1.3 Coercion

For tying to be an abuse, the client must be coerced to accept the tied product.<sup>136</sup> There are different forms of coercion.<sup>137</sup> One form is the contractual condition that the tying product is only sold if the buyer also buys the tied product.<sup>138</sup> Coercion can also apply if the tied product is integrated into the tying product without paying an explicit price for the tied product.<sup>139</sup> This form of coercion arose in the *Microsoft* case because in this case consumers did not have the option of obtaining the Windows client PC operating system without Windows Media Player and Microsoft did not charge a special price for the Windows Media Player.<sup>140</sup>

##### 3.1.4 Anti-competitive foreclosure in the tied and/or tying market

Tying is an abuse only if it is likely to cause anti-competitive foreclosure.<sup>141</sup> Anti-competitive foreclosure means "a situation where effective access of actual or potential competitors to supplies or markets is hampered or eliminated as a result of the conduct of the dominant undertaking whereby the dominant undertaking is likely to be in a position to profitably increase prices to the

<sup>129</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), paragraph 49.

<sup>130</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), footnote 3 to paragraph 50.

<sup>131</sup> Ibid.

<sup>132</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), paragraph 50.

<sup>133</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), paragraph 51.

<sup>134</sup> Ibid.

<sup>135</sup> EGC, Judgment in *Microsoft*, T-201/04, ECLI:EU:T:2007:289, paragraph 933.

<sup>136</sup> EGC, Judgment in *Microsoft*, T-201/04, ECLI:EU:T:2007:289, paragraph 44.

<sup>137</sup> Eilmannsberger, in: Streinz, EUV/AEUV, 2. Auflage 2012, Beck-Verlag München, Art. 102, paragraph 104.

<sup>138</sup> Commission Decision 92/163/EEC, Tetra Pak II, Official Journal 1992 L 72/1.

<sup>139</sup> Eilmannsberger, in: Streinz, EUV/AEUV, 2. Auflage 2012, Beck-Verlag München, Art. 102, paragraph 105.

<sup>140</sup> EGC, Judgment in *Microsoft*, T-201/04, ECLI:EU:T:2007:289, paragraphs 945, 968 et seq.

<sup>141</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), No 50.



detriment of consumers".<sup>142</sup>

When identifying anti-competitive foreclosure, a.o. the following criteria are especially relevant:

- **The position of the dominant undertaking:** The stronger the dominant position, the higher the likelihood that conduct protecting that position leads to a anti-competitive foreclosure<sup>143</sup>.
- **The position of the undertaking's competitors**<sup>144</sup>: The closest competitor or a particularly innovative competitor may have effective counterstrategies which may have an impact on anti-competitive foreclosure.
- **The expected duration of the tying or bundling:** The risk of anti-competitive foreclosure is greater, when the tying or bundling is expected to last longer, e.g. because technical tying might be costly to reverse<sup>145</sup>
- **The degree of dominance in markets of the bundle:** The greater the number of markets in which a bundling undertaking holds a dominant position and which are part of the bundle, the stronger the likelihood of anti-competitive behaviour.<sup>146</sup>

### 3.1.5 Objective reasons

A dominant undertaking's abusive tying and/or bundling may be justified where the supplementary obligations, by their nature or according to commercial usage, have a connection with the subject of the contract.<sup>147</sup> Such a **natural connection** is given where convincing technical or economic reasons justify a grouping of products.<sup>148</sup> A **commercial usage** can justify an abusive conduct only exceptionally.<sup>149</sup>

A dominant undertaking may also bring forward that its tying and bundling conduct is justified by demonstrating that it is **objectively necessary** for instance, for health or safety reasons.<sup>150</sup> The Commission and the Courts tend to interpret this condition restrictively, because these reasons often serve to hide intentions aiming at restricting competition.<sup>151, 152, 153</sup>

<sup>142</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), No 19.

<sup>143</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), No 20.

<sup>144</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), No 20.

<sup>145</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), No 53.

<sup>146</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), No 54.

<sup>147</sup> Article 102 (2) (d) TFEU.

<sup>148</sup> Immenga/Mestmäcker, Wettbewerbsrecht Band 1: EU/Teil 1, Kommentar zum Europäischen Kartellrecht, 5. Auflage 2012, C.H. Beck Verlag, München, Art. 82 EGV, paragraph 209 with further reference; Mestmäcker/Schweitzer, Europäisches Wettbewerbsrecht, 3. Auflage 2014, § 18 paragraph 37.

<sup>149</sup> Mestmäcker/Schweitzer, Europäisches Wettbewerbsrecht, 3. Auflage 2014, § 18 paragraph 38.

<sup>150</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), paragraph 29.

<sup>151</sup> Immenga/Mestmäcker, Wettbewerbsrecht Band 1: EU/Teil 1, Kommentar zum Europäischen Kartellrecht, 5. Auflage 2012, C.H. Beck Verlag, München, Art. 82 EGV, paragraph 211.

<sup>152</sup> EGC, Judgment in Hilti, T-30/89, ECLI:EU:T:1991:70, paragraph 118, ECJ, Judgment in Hilti, C-53/92 P, ECLI:EU:C:1994:77.

<sup>153</sup> EGC, Judgment in Tetra Pak, T-83/91, ECLI:EU:T:1994:246, paragraph 139, ECJ, Judgment in Tetra Pak, C-333/94 P, ECLI:EU:C:1996:436, paragraph 36.

Alternatively, a dominant undertaking may argue that its tying and bundling conduct is justified by **substantial efficiencies**. This is the case if the following criteria are met<sup>154</sup>:

- The efficiencies, e.g. technical improvements in the quality of products or a reduction in the cost of production or distribution must be the result of the tying and bundling.
- The tying and bundling must be indispensable to the realisation of these efficiencies.
- The efficiencies must outweigh any likely negative effects on competition and consumer welfare in the affected markets.
- The conduct must not eliminate effective competition.

### 3.1.6 Application to the Consumer Internet Industry

In the reality of the consumer internet industry, most smartphones are tied to a specific operating system. Applying the criteria set out to tying the product “smartphone” with the service “operating system” (which in turn enables the gathering of data and the expansion of access to consumers) gives the following image.

The tying will be abusive if:

- Market dominance in the smartphone market is given.
- A substantial part of customers would have bought the smartphone without the operating system. If this were the case, they would be considered “distinct products” and the linkage of the two goods would tend to be abusive.
- Coercion is present; this could be affirmed as operating system are usually a well-integrated part of the selling of mobile phones.
- Anti-competitive foreclosure is present; this depends on, inter alia the strength of the dominant smartphone manufacturer and the available means and possibilities by competitors to counter foreclosing behavior (e.g. by innovation).
- There are no objective reasons for tying. In this case, these may be present in a natural connection between the linked goods. In our example, one could argue that a smartphone without a pre-installed operating system is not very valuable as all its functionalities depend on it. However, it might be more difficult to argue that the specific operating system of the dominant player has to be on the phone. A connection with a competing system might be feasible as well.

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<sup>154</sup> Communication from the Commission – Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), paragraph 28 and 30.

## 4 Coping with Problem 3: Abuse within Wholesale Markets

### 4.1 Using Competition Law

#### 4.1.1 Unfair Prices and Unfair Trading Conditions

Article 102 (2) (a) TFEU covers abuses through excessively high selling prices (or excessively low purchasing prices)<sup>155</sup> and unfair trading conditions. When investigating whether excessively high selling prices exist, a.o. the following criterion is being used:

- prices are excessive in relation to the economic value of the service provided<sup>156</sup>; this is checked by comparing the contested prices with prices achieved on “comparable markets”<sup>157</sup>.

When investigating whether unfair trading conditions exist, a.o. the following criterion is being used:

- the impact of the trading conditions on the competitive structure of the internal market<sup>158</sup>; this requires a balancing with the legitimate interests of the contracting parties as pursued by the contractual conditions<sup>159</sup> and the maximum safeguard of their economic freedom.<sup>160</sup>

#### 4.1.2 Discrimination

Article 102 (2) (c) TFEU covers abusive behaviour by a dominant enterprise applying dissimilar conditions to equivalent transactions with trading parties on upstream or downstream markets (so-called secondary line competition).<sup>161</sup> Discrimination of competitors (so-called primary line competition) is also prohibited by Article 102 TFEU, although it is disputed whether it is covered by litera b or c, or the general clause Article 102 (1) TFEU.<sup>162</sup>

When investigating whether discrimination under Article 102 (2) (c) TFEU is actually present, a.o. the following criteria are relevant:

- Are the parties concerned to be seen as “trading parties”?
- Are the transactions concerned actually equivalent?
- Is there an objective reason for the unequal treatment by the dominant undertaking?<sup>163</sup>

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<sup>155</sup> Geiger/Khan/Kotzur, European Union Treaties Article 102 paragraph 14.

<sup>156</sup> ECJ, Judgment in General Motors, C-26/75, ECLI:C:1975:150, paragraph 11.

<sup>157</sup> Mestmäcker/Schweitzer, Europäisches Wettbewerbsrecht, 3. Auflage 2014, § 18 paragraph 4 et seq.

<sup>158</sup> Immenga/Mestmäcker, Wettbewerbsrecht Band 1: EU/Teil 1, Kommentar zum Europäischen Kartellrecht, 5. Auflage 2012, C.H. Beck Verlag, München, Art. 82 EGV, paragraph 150.

<sup>159</sup> Mestmäcker/Schweitzer, Europäisches Wettbewerbsrecht, 3. Auflage 2014, § 18 paragraph 7.

<sup>160</sup> Jung, in: Grabitz/Hilf/Nettesheim, AEUV, Article 102, paragraph 345.

<sup>161</sup> Mestmäcker/Schweitzer, Europäisches Wettbewerbsrecht, 3. Auflage 2014, § 18 paragraph 21; Gerardin/Petit, Price Discrimination under EC Competition Law: The Need for a case-by-case Approach, The Global Competition Law Centre Working Papers Series, GCLC Working Paper 07/05, p. 8 et seq.

<sup>162</sup> Mestmäcker/Schweitzer, Europäisches Wettbewerbsrecht, 3. Auflage 2014, § 18 paragraph 21; Gerardin/Petit, Price Discrimination under EC Competition Law: The Need for a case-by-case Approach, The Global Competition Law Centre Working Papers Series, GCLC Working Paper 07/05, p. 9.

<sup>163</sup> Möschel, in: Immenga/Mestmäcker, Wettbewerbsrecht Band 1: EU/Teil 1, Kommentar zum Europäischen Kartellrecht, 5. Auflage 2012, C.H. Beck Verlag, München, Art. 82 EGV, paragraph 257.

### 4.1.3 Exclusive Dealing

A dominant undertaking which binds purchasers – even if it does so at their request – by an obligation or promise on their part to obtain all or most of their requirements exclusively from the said undertaking or by rebates abuses its dominant position.<sup>164,165</sup>

Such dealing is seen as an abuse, especially if:

- The dominant undertaking has many customers and the exclusive purchasing obligations have the effect of preventing the entry or expansion of competing undertakings.<sup>166</sup>
- Competitors of the dominant enterprise cannot compete on equal terms with the dominant enterprise for each individual customer's entire demand (e.g. due to capacity constraints).<sup>167</sup>
- The duration of the purchasing obligation is long.<sup>168</sup>

## 5 Coping with Problem 4: Distortion of Competition due to Differences in Data Protection Law

### 5.1 Using Data Protection Law

Loopholes in the General Data Protection Regulation may not only cause damage to European citizens. They are likely to cause competitive distortions at the detriment of European enterprises, which are subject to the strict material instructions of the Regulation.

This holds true especially regarding the playing field between European and US players of the consumer internet industry. The pending EU-Commission's adequacy decision will play a decisive role for this playing field being (un)level.

Currently, the "safe harbor" controversy focusses on intelligence services' activities endangering fundamental rights of data subjects. However, from a competition point of view, it is equally relevant to ensure *material* adequacy, i.e. rules concerning data gathering and processing being (close to) identical both for European and US service providers.

The method of choice to avoid such problems is not competition law, but will be data protection law: The pending "adequacy decision" decision by the EU-Commission will be of essential importance for fair competition in the EU.

Whether the „EU-US Privacy Shield“ enables an “adequacy decision”, meeting the ECJ's standards at all; and secondly, whether such “adequacy decision” would lead to a level-playing field in data protection between European and US-American service providers, is an open question.

Focussing on the second part of question here, it should be kept in mind that the ECJ has set out a number of clear conditions, a.o. concerning judicial relief. Whether the US-Proposals under the „EU-US Privacy Shield“ will be sufficient, is unclear at the moment. Whereas the ECJ has mentioned the

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<sup>164</sup> ECJ, Judgment in Hoffmann-La Roche, C-85/76, ECLI:EU:C:1979:36, paragraph 89.

<sup>165</sup> Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009/C 45/02), No 32.

<sup>166</sup> Ibid., No 34.

<sup>167</sup> Ibid., No 36.

<sup>168</sup> Ibid.

importance of *judicial* relief, it is not totally clear yet whether such kind of relief will be part of the framework of the „EU-US Privacy Shield“. A regulatory change in the USA (e.g. by the "Judicial Redress Act") may well be necessary to guarantee such *judicial* relief. Without such *judicial* relief, even a materially level playing field risks to further cause distortions in competition between European and US service providers.

On the material level, following both the ECJ's *Schrems* judgement and the political compromise on the GDPR, the EU-Commission and the European Data Protection Board may further use a number of instruments to ensure a materially level playing field between the EU and the US, the most relevant of which are:

- an “adequacy decision”, covering the USA as a whole,
- standard data protection clauses and
- binding corporate rules.

Any export of data on EU subjects to third countries can be expected to be re-used within the EU and is hence a source of competitive distortions within the EU. Against this background, it is well justified for the EU to allow such exports only given the conditions applicable to exporting data controllers or processors being comparable, if not identical to those in the EU. It is up to the EU-Commission to insist on such quasi-identical rules, in whatever instrument(s) it chooses to use.

## 6 Conclusion

From an economic point of view, public intervention against an abusive monopolist is necessary only when the monopolist is not contestable. However, the consumer internet industry is characterised by a high degree of innovation and/or risky investment and by intellectual property rights. All of these deserve a certain protection, also when causing non-contestable market power. We favour obligatory access pricing taking account of risks and uncertainties entered into by the newborn monopolist. This will prevent mere copying of innovations but allows for innovative downstream competition.

The problem of denial of access (problem 1) is best solved when applying the essential facilities doctrine under EU-competition law. According to this doctrine, denial of access to intellectual property by a rightholder can be an abusive behaviour according to Article 102 TFEU. The remedy lays in dominant enterprises being forced to grant paid access to wholesale input (data and access to consumers). For this to be relevant, the European courts have developed four exceptional circumstances, which must be met. These circumstances can be reasonably applied to the consumer internet industry.

Still regarding problem 1, a number of particularities of the consumer internet industry speak against a broad application of ex-ante sector specific regulation in the consumer internet industry. In many cases, ex-post applying competition law is the preferable option.

Problems 2 (tying and bundling) and 3 (abuse within wholesale markets) can be rather straightforwardly dealt with using standing principles of EU competition law.

Regarding problem 4, it is common sense that differences in data protection laws may seriously distort competition. Even when focussing on the negative consequences on competition, the method of choice to avoid such problem is not competition law, but will be data protection law. The most relevant distortions are to be expected between the EU and the US. Following the ECJ

declaring the Commission's "safe harbor decision" invalid, and under the upcoming general data protection regulation, it is now up to the EU-Commission and the European Data Protection Board to ensure that no major differences persists between data protection regimes governing European and US services providers competing for European customers. This would distort competition to the disadvantage of European service providers. The EU-Commission may use an updated "adequacy decision" and the European Data Protection Board may use standard data protection clauses or binding corporate rules to reach this aim.

## Findings and Recommendations

### PROBLEMS

- ▶ **The consumer internet industry**, which encompasses the totality of consumers as well as producers and service providers using the internet as a means to buy or sell products and services to end-consumers, **is likely to be hit by competition problems.**
- ▶ **This study focuses on “data” and on “access to consumers”.** These factors are both (1) outputs resulting from entrepreneurial activities on digital retail markets and (2) wholesale inputs for entrepreneurial activities on these (or other) retail markets. As a result, “data” and “access to consumers” **drive competition problems since they (1) self-reinforce market power and (2) enable the transfer of market power across markets.**
- ▶ We identify **four specific competition problems** in the consumer internet industry.
  - **Problem 1: Denial of access.** As a result of their activities on retail markets, enterprises may gain a dominant position in the wholesale markets for data or access to consumers. Consequently, they have an incentive to deny competitors access to these inputs. Given that data and access to consumers may be essential inputs to activities on a great number of very diverse retail markets, this **may result in a small number of enterprises gaining market dominance on a number of very different retail markets.**
  - **Problem 2: Tying and bundling.** Enterprises may tie and/or bundle retail products and services in an attempt **to gain market power on markets for data and/or access to consumers.**
  - **Problem 3: Market power abuse within wholesale markets** for data and access to consumers.
  - **Problem 4: Competitive distortions to the detriment of European enterprises due to differences in data protection law**, especially regarding export of personal data to the USA.

### RECOMMENDATIONS

#### Regarding problems 1 - 3

- ▶ **EU policy makers should restrain from legislative action.** Given the innovative character of the consumer internet industry and the versatility of its wholesale markets, the added-value of sector-specific regulation is very limited.
- ▶ Instead, **competition authorities should define wholesale markets for data and access to consumers** within the consumer internet industry. Having done so, **existing European competition law can adequately deal with problems 1 - 3.**
- ▶ In particular, applying **the “essential facilities doctrine” in EU competition law** offers significant potential. It may force enterprises with a dominant position in the wholesale

markets for data and access to consumers to grant competitors paid access to these wholesale inputs. This **may hinder a small number of enterprises gaining market dominance on a number of very different retail markets.**

#### **Regarding problem 4**

- ▶ **Action by EU policy makers is necessary** to avoid competitive distortions between EU and US-American enterprises. The method of choice to avoid such problem is not competition law, but will be data protection law. The most relevant distortions are to be expected between the EU and the US. Following the ECJ declaring the Commission's "safe harbor decision" invalid, and under the upcoming general data protection regulation, **it is now up to the EU-Commission and the European Data Protection Board to ensure that no major differences persists between data protection regimes governing European and US services providers competing for European customers.** This would distort competition to the disadvantage of European service providers. The EU-Commission may use an updated "adequacy decision" and the European Data Protection Board may use standard data protection clauses or binding corporate rules to reach this aim.



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