

Digital Platforms: To Regulate or Not To Regulate?

Message to Regulators: *Fix the Economics First, Then Focus on the Right Regulation*

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Digital platforms, such as Facebook, Google, Amazon, Alibaba, Uber, TaskRabbit, Airbnb or Kickstarter, are playing an increasing role in the economy by allowing new entrants, including non-professional operators, to offer content, goods, services or capital to the users of the platform. By facilitating the match between numerous suppliers and users, platforms allow new uses of existing resources owned by individuals ('my data, my car, my home, my used items, my money...') and thus support market exchanges. They also create new market opportunities, including some labor, if not real jobs.¹ Bringing new entrants to the market and enrolling a 'new' workforce (the car drivers, the house owners, the owners of used goods, etc.) or mobilizing 'new' capital (in the hands of private persons) often has a disruptive effect on existing markets and operators, be it the taxi companies, the hotels, the traditional distributors of goods or the financial institutions.²

Disruption has become a buzzword to designate this new phenomenon, even in the media.³ It has an economic meaning when it refers to the challenge new online operators present for incumbents. But the term 'disruption' is also associated with the challenge those entrants pose to the existing laws. Indeed the digital platforms generate many legal disputes, especially when they operate at the margin of existing laws (for example, labor law in the case of Uber, copyright law and data protection law in the case of Google, data protection in the case of Facebook, etc.). Some of those platforms are more legally disruptive than others. But most, if not all, platforms may raise specific regulatory issues.⁴

Before examining the economic and legal disruption generated by the platforms, we focus on the issue of definition in the first part of this paper. The notion of 'platform'⁵ is indeed widely used by academics⁶, by public authorities and by commentators (including in the press), but we still lack a

¹ The platforms might increase the total number of 'working hours' by allowing people who have time (and not enough revenues) to participate to the new markets which capture the value of 'sleeping goods' (which are owned, but not fully used and thus under-exploited). New working and revenue opportunities are thus generated, something to cheer about. Whether the platforms create 'real jobs' falling under the labor and social security rules is another issue, and there are thus good reasons to worry about the impact of the platform economy on the welfare State and its redistributive role.

² The old notion of "creative destruction" as developed by J. Schumpeter seems to adequately describe the ambivalent effects those digital platforms have on the economy.

³ 'Disruption' was even considered as the « buzzword of 2015 » by some newspapers (see *De Standaard* on http://www.standaard.be/cnt/dmf20151217_02025959).

⁴ According to the European Commission (Communication, *A Digital Single Market Strategy for Europe*, COM(2015) 192 final, 6 May 2015): "platforms have proven to be innovators in the digital economy, helping smaller businesses to move online and reach new markets. New platforms in mobility services, tourism, music, audiovisual, education, finance, accommodation and recruitment have rapidly and profoundly challenged traditional business models and have grown exponentially. The rise of the sharing economy also offers opportunities for increased efficiency, growth and jobs, through improved consumer choice, but also potentially raises new regulatory questions ».

⁵ In the rest of the contribution, we will use 'platform' to refer to the 'digital platforms' in the sense described in part I.

⁶ Some lawyers have now coined the term 'law of platform' which seems to refer to the body of rules applying to platforms (see the increasing literature in the U.S. and for instance O. Lobel, *The Law of the Platform*, (draft paper), Sept. 2015). Although most platforms challenge the law, there is no legal discipline to be called 'platform law'. The existing *competition law* and the still to be designed *data law* (see below) are however involved in many disputes involving digital platforms and are thus close to what a law specific to platforms could be, if it were to exist.

workable definition. It must first be clear that the focus here is not on the myriad of community exchanges that have developed at local level (the true 'sharing economy'). Instead, while tackling the issues raised by platforms, we concentrate on profit-seeking global businesses (as best illustrated by Uber). Our focus here is the "uberisation"⁷ of the economy by which we mean the deconstruction of the value chain by new intermediaries which, through the use of digital technologies (mainly apps, smartphones and online payment systems), capture part of the value at the detriment of traditional operators. Not only taxi companies, hotels, restaurants, retailers, but also insurers⁸, banks, travelling services (beyond the reservation services)⁹, operators in the agri-food chain, etc. are likely to be challenged, with many more sectors thereafter.

In the second part, we articulate some views on the economics of digital platforms, how those operators challenge existing firms and how the economic analysis should better take into account the network effects of digital platforms, the agility of the platforms, as well as the volatile market changes. Those considerations remain very sketchy and general, as economic analysis is still developing, in theory and around particular case studies.

In the third part, we focus on regulation and highlight the legal disruptions created by those platforms. The impressive deployment of platforms and their growing market power in many sectors have prompted decision-makers, especially in France and Germany, to advocate the adoption of new regulation. This has become a debated and even politically laden topic. Caution against any premature regulatory push is recommended. Our message, as summarized in the sub-title of this contribution, is that any regulatory overhaul should first rely on a sound economic analysis of the markets. However, for us, the response to the question in the title of this contribution is positive.¹⁰ Some regulatory action is desirable. That said, legislators, in particular at the EU level, must focus on the right issues calling for public intervention. We identify the laws on data (as defined below) as a primary area for possible action at EU level.

Our contribution partly responds to the late 2015 consultations initiated by the European Commission and the UK House of Lords¹¹ on "the regulatory environment for platforms".¹² It also builds on the recent studies conducted by consultation bodies in France and Germany.¹³

⁷ The term has become popular since it was used by Maurice Levy, the boss of Publicis, in a *Financial Times* interview on Dec. 14, 2014 (« Everyone is starting to worry about being uberized »). Let's remember that another somewhat barbaric term appeared a few years ago to refer to the growing influence of the Google platform : the « googlelisation of everything ». This refers to the increasing power of Google as the tool and sole filter through which we access online information, making of Google the Internet gatekeeper. This term was used in academic circles while the "uberisation of everything" is now widely used by the press. Some time ago, the criticisms concentrated on the impact Google has on the creative and advertising industries; today, the attention of the media has shifted to the platforms which challenge the service industries and impact the way we regulate the work environment.

⁸ See *Le dilemme des assureurs : donner ses données ou se faire uberiser*, *L'Usine digitale*, 6 Nov. 2015 (<http://www.usine-digitale.fr/editorial/le-dilemme-des-assureurs-donner-ses-donnees-ou-se-faire-uberiser.N360947>).

⁹ See *Industrie du voyage : les barbares du numérique entrent en piste*, *L'Usine digitale*, 9 June 2015 (<http://www.usine-digitale.fr/article/industrie-du-voyage-les-barbares-du-numerique-entrent-en-piste.N334131>).

¹⁰ See also A. Strowel, *Vers une régulation des plates-formes internet ?*, *Journal de droit européen*, June 2015, No 220, op-ed, p. 225.

¹¹ See the October 2015 public consultations of the European Commission: <https://ec.europa.eu/digital-agenda/en/news/public-consultation-regulatory-environment-platforms-online-intermediaries-data-and-cloud> ; and of the UK House of Lords (with a "Call for Evidence": <http://www.parliament.uk/business/committees/committees-a-z/lords-select/eu-internal-market-subcommittee/news-parliament-2015/online-platforms-inquiry-launch/>).

¹² For instance, in this contribution, we partly respond to the House of Lords questions listed in the « Call for Evidence » : 1) on the definition of platforms ; 3), 4) and 5) on the platforms' effects on the markets and

I. Definition of digital platforms

Policy makers are currently debating if, and if so how, the new digital platforms should be regulated ex ante. Any form of regulation that singles out digital platforms presupposes a workable definition.

a) Distinction between community exchanges and digital platforms. To avoid confusion, a first delineation has to be drawn between the local community exchanges and the global platforms. Both rely on “matching supply and demand more efficiently, using technology to reduce the transaction costs involved in acquiring goods or services from the people able to provide them”.¹⁴ But the profit objective and the way digital platforms operate are very different from the objective and more truly collaborative approach of the community exchanges. Following the great economic crisis of 2008 and the penetration of smartphones, many free services have developed to share the harvests of private gardens, to borrow private clothes, to use the spared time of neighbors, the expertise of citizens or the couch of foreigners, etc.¹⁵ Those community services differ from the platforms by several features¹⁶:

i) the platforms clearly monetize the use of the under-exploited resources of the suppliers (for ex. the car drivers) to the benefit of the suppliers and of the platform’s shareholders;

ii) the value of the resource to which the platform grants access usually requires some relatively important investment from the supplier. The supplier indeed needs some capital to own a car or a house; but for online marketplaces offering all sorts of goods, such as eBay or Amazon, this is not so much the case. When the platform acts as an intermediary for the provision of high-end services, such as web development, accountancy or translation services, an intellectual capital or expertise is at least needed from the suppliers.¹⁷

beyond ; 6) on the need to address the challenges of online platforms ; 7) and 8) on the role of competition law ; 9) and 10) on the collection and use of data ; 13) till 16) on the regulatory environment.

¹³ See in France : Conseil National du Numérique, *Ambition numérique, Pour une politique française et européenne de la transition numérique*, June 2015 and *La neutralité des plateformes*, www.cnummerique.fr/plateformes, June 2014; Assemblée nationale, Chr. Paul et Chr. Féral-Schuhl (sous la prés. de), *Rapport d’information déposé par la Commission de réflexion et de propositions sur le droit et les libertés à l’âge du numérique*, 8 oct. 2015 (in particular p. 190-219 on « la loyauté des plateformes ») ; in Germany : Monopolkommission, *Competition policy : The challenge of digital markets*, Special Report No 68, July 2015.

¹⁴ D. Coyle (Prof. of economics at the University of Manchester), *The hobbit approach to the sharing economy*, *Financial Times*, 28 Dec. 2015.

¹⁵ For example, the service « couchsurfing » (www.couchsurfing.com) proposes to share modest accommodation facilities (the ‘couch’) without any monetary counterpart. Similarly, the contributors to Wikipedia donate some time when drafting the entries to the well-known online encyclopedia. The community exchanges for content (digital goods) such as Wikipedia predate the more recent community services (involving various tangible goods and services). Many other local community exchanges could be named : let’s list for Belgium (in particular Brussels) in the transport field : *Cambio* (www.cambio.be) which offers a car sharing service that nears the approach of small communities although it involves non-profit associations and providers of public transport services, *Zen Car* (payment per use of car), *Autopia* ; in the food sector : *Agricovert*, *Beescoop*, *Gasap* etc. There are plenty of those more local and cooperative services and more could be said as their models also differ widely.

¹⁶ We thus only partly share the criteria of distinction proposed by E. Szoc (*Du partage à l’enchère : les infortunes de la « Sharing Economy »*, April 2015 available at <http://acjj.be/publications/nos-analyses/du-partage-a-l-enchere-les.html> accessed on Dec. 28, 2015).

¹⁷ See www.upwork.com. However, the initial capital (in term of expertise or knowledge) needed to be a supplier on some of those ‘task platforms’ can be rather low (for ex. on TaskRabbit, www.taskrabbit.com). Those ‘task platforms’ excel in showing the friendliness of their role as they promote the possibility for their

iii) In the case of platforms, the intermediary is often able to raise huge amounts of funding from investors¹⁸ and/or has developed a very effective revenue model.¹⁹ Not only do the platforms enjoy huge funding or revenue streams, their objective is also clearly capitalistic, far away from the non-profit, social or community-focused objectives of the community exchanges.

The possibility to delocalize the service is not a very convincing criterion for distinguishing platforms from community exchanges as many services offered by capitalistic platforms are location-dependent (the location of the car and of the user in case of Uber, the location of the house in the case of Airbnb, the dog-sitting service, etc.). For some intellectual jobs (e.g. webdesign, legal advice, translation, accounting, etc.) offered by what could be called the “task platforms”, the localization of the supplier and the user is not relevant as the work can be provided from far away over the Internet. This indicates that ‘task platforms’ focusing on intellectual work are probably more challenging than other platforms: the new competition created by those platforms is truly global (while Uber challenges the local taxi companies in all the cities where it operates). The title of the cover story of an early 2015 issue of *The Economist*, “*Workers on tap*”, better encapsulates the possible effect of those ‘task platforms’: “*The on-demand economy, writes The Economist, allows society to tap into its under-used resources*”²⁰, and often at worldwide scale. The “on-demand economy” is another of those magic terms which have spread recently to designate the new economy; it probably catches more adequately the situation than the misleading terms “sharing economy”, “collaborative economy”, “P2P economy”, “gig economy”, “mesh economy”...

In any case, it is essential to distinguish the platforms which arguably are part of what has been called the “platform capitalism”²¹ from more modest and local community exchanges also enhanced by digital technology, but as well by true aspirations to a more cooperative style of living, away from the market forces and constraints.

b) Typology of platforms. Platforms do not have to invest directly in the production of the content, goods, services or capital they give access to, but can all rely on the resources provided by third parties. This idea is nicely encapsulated in the following table (*Something interesting is happening*²² with the platform economy):

users « *to do what you love : hang out with your kids, read a good book, go for a bike ride, catch up with friends...* », while the task suppliers will « *clean your house, run your errands, clean your oven, build your IKEA furniture...* » (see the advertising motto on www.taskrabbit.com, accessed on Dec. 28, 2015).

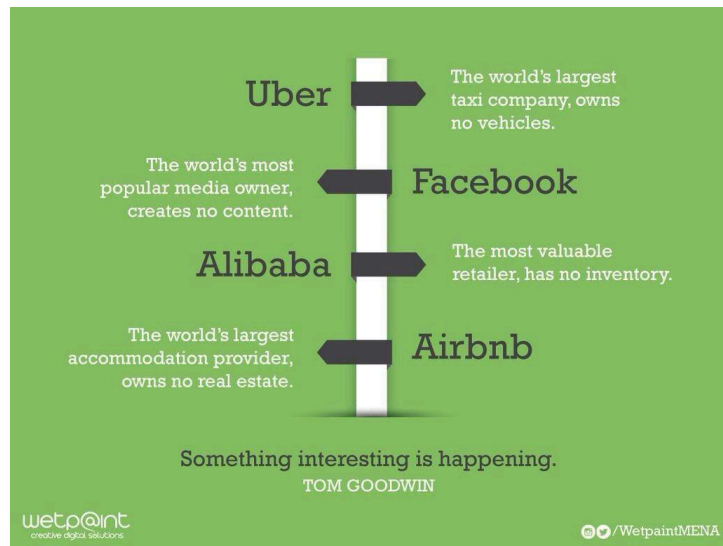
¹⁸ Uber and its competitor Lyft for instance have recently doubled their fundraising to amass a combined \$3.1bn from investors, which shows how easy it still is for those starts-up to access capital (*Financial Times*, Dec. 23, 2015).

¹⁹ Google is a good example of a platform which has developed a powerful business model as its revenues from ads have grown steeply over the last decade (from \$3,1 bn in 2004 to more than \$66bn in 2014) aspiring the revenues of traditional media, such as newspapers and broadcasters.

²⁰ See *The Economist*, 3rd Jan. 2015 (*Workers on tap. The rise of the on-demand economy poses difficult questions for workers, companies and politicians*), available at <http://www.economist.com/news/leaders/21637393-rise-demand-economy-poses-difficult-questions-workers-companies-and>

²¹ The appellation sounds even better in German: “Plattform-Kapitalismus”. See the view of the German activist Sascha Lobo, *Die Mensch-Maschine : Auf dem Weg in die Dumpinghölle*, on *Spiegel Online* <http://www.spiegel.de/netzwelt/netzpolitik/sascha-lobo-sharing-economy-wie-bei-uber-ist-plattform-kapitalismus-a-989584.html> accessed on Dec. 28, 2015 (« Was man Sharing-Ökonomie nennt, ist nur ein Aspekt einer viel größeren Entwicklung, einer neuen Form des digitalen Kapitalismus: Plattform-Kapitalismus »).

²² Image by Wetp@int Mena – <http://wetpaint-mena.com/> accessed on Dec. 28, 2015.



Beyond this common aspect, we first propose a high level typology of digital platforms based on the type of resources they grant access to:

- a) access to *information* (or *content*) such as general search engines (e. g. Google, Bing) or specialised search engines (e. g. TripAdvisor, Yelp, Google Shopping, Kelkoo, Twenga); this category also includes other services granting access to *a great variety of content*, for instance maps (e. g. Google Maps, Bing Maps) or more creative content such as news aggregators (e. g. Google News, Twitter) or video platforms (e. g. YouTube, Dailymotion);
- b) access to *personal data*²³ and other '*private*' content such as the social networks (e. g. Facebook, LinkedIn);
- c) access to *goods and/or services* offered by third parties such as online markets (e. g. Amazon, eBay, Alibaba, Allegro, Booking.com) or 'sharing economy' platforms (e. g. Airbnb, Uber, BlaBlaCar); here, *a great variety of goods and/or services* is offered. It is not completely clear whether the new 'sharing economy' platforms should be treated differently from the already known online markets;
- d) access to a *workforce* or to *the expertise or intellectual capabilities* of people (TaskRabbit, Upwork); the 'task platforms' raise specific issues with regard to labor;
- e) access to *money or capital* such as crowdfunding sites (e. g. Kickstarter, Gofundme) or *payment systems* (e. g. PayPal, Mastercard, Bitcoin).

The platforms for accessing content (for ex. the Google ecosystem) were created before the online platforms for accessing services involving tangible goods (for ex. Uber or Lyft, Airbnb), but the e-commerce platforms giving access to (second hand) goods are known for long. There is thus probably something to learn from the cases where the content platforms have challenged the incumbents (for ex. Google against the newspapers, book publishers, film or map producers, TV stations, price comparison services, etc.).²⁴ However, regarding information platforms, the users are often also the suppliers of the content (this is typical of platforms such as YouTube with so-called "user-generated content" or UGC). This reversibility of the roles around some content platforms does not exist with many "sharing economy" platforms.

The maturity of the technological infrastructure also plays a role in the deployment of the various types of platforms. The content platforms such as Google or Facebook were initially accessed

²³ If all platforms are using personal data as an engine for their market power and expansion (see below), only certain platforms are offering private content as value for their users (who are at the same time the suppliers).

²⁴ See A. Strowel, *Quand Google défie le droit*, De Boeck et Larquier, 2011.

through computers, while the widespread take-off of the smartphones and online apps has permitted the development of other services more dependent on the location of the suppliers and users (this is clearly the case with mobility services).

Other online services aggregate creative content but negotiate with the existing producers as no alternative hobby producer is able to match the professional offer: this is the case with online services offering access to mass-marketed audio-visual and musical content. In its October 2015 consultation document on the regulatory environment (p. 5-6), the European Commission includes those audio-visual and music services under the “online platform” definition and lists Deezer, Spotify, Netflix, Apple TV. Those online providers of entertainment content should be treated differently than the digital platforms mobilizing the resources of the crowd. The dividing line is however not always crystal clear. For instance Google News and YouTube offer access to content (news and videos) produced either by media outlets or by Internet users. For the sake of clarity, it is advisable not to include those online providers of (mainly) professional content within the category of digital platforms. Most if not all media companies would then also fall under the category of platform.

In the following contribution, we focus on the platforms under a) and c) offering access to a variety of information/content and to a variety of goods and services (while leaving outside the other types, for instance the crowdfunding platforms which pose quite specific questions to financial regulation).

c) Discussion of legal definitions. Several legal definitions of digital platforms have been proposed or even codified in the law. The French authorities in particular were quick to act on the challenge of platforms. According to the June 2015 Report of the French Conseil National du Numérique, *“Une plateforme pourrait être définie comme un service occupant une fonction d’intermédiaire dans l’accès aux informations, contenus, services ou biens, le plus souvent édités ou fournis par des tiers.”*²⁵

A recent French draft law on “La République numérique” proposes to include a new definition in consumer law: *« Sont qualifiées de plateformes en ligne, au sens du présent article, les activités consistant à classer ou référencer des contenus, biens ou services proposés ou mis en ligne par des tiers, ou de mettre en relation, par voie électronique, plusieurs parties en vue de la vente d’un bien, de la fourniture d’un service, y compris à titre non rémunéré, ou de l’échange ou du partage d’un bien ou d’un service. »* (new Art. L.111-5-1 *Code de la consommation*²⁶). The second part of this definition is particularly broad as it seems to encompass any intermediary on the market as long as it brings into contact the two sides of the market by using electronic means. The fact that platforms classify and reference several contents, goods and services (as underlined in the first part of this legal definition) seems more specific to online platforms.

Arguably those legal definitions are too broad and do not take into account the economic effects of the various platforms which are characterized by strong, yet different, network effects. A too broad definition of digital platform may lead to ineffective or even counterproductive ex ante regulation.

Economic analysis could better characterize the specificities of online platforms, and among the ways to differentiate the issues, we suggest to focus on the type of item to which the platform offers access to. The traditional distinctions between the various providers of goods and services and the underlying markets (as well as the associated legal guarantees, liabilities and obligations) could thus

²⁵ Conseil National du Numérique, *Ambition numérique, Pour une politique française et européenne de la transition numérique*, June 2015, p. 49.

²⁶ The existing Article L.111-5 of the *Code de la consommation* (adopted by a law of 17 March 2014) creates some transparency and loyalty obligations for the intermediaries offering online information allowing to compare the price and features of goods and services proposed by professionals. Since the amendment by the law of August 5, 2015 (‘loi Macron’), it also covers the online platforms which play a role between non-professional suppliers and users. Such platforms must provide fair, clear and transparent information on the suppliers and on the civil and fiscal obligations of the parties to the transactions they facilitate.

resurface if this factor is taken into account. Obviously, the for-profit (versus social, cooperative, community-centered) objective is a pre-requisite for avoiding confusion within the wrongly baptized “sharing economy”.

Those distinctions could lead to an improved legal definition of online platforms or to the rejection of the legal category of “digital platform” altogether: indeed, the legal category is probably not very helpful because it might be too broad.²⁷ In certain cases, as illustrated below, an horizontal regulatory approach (thus treating all platforms in a similar way) might be welcomed, such as when protecting consumers, workers or the collection of taxes, but query whether the classical notions of intermediary or vendor would not suffice.

II. Some preliminary thoughts on the economics of online platforms

a) Platforms as two- or multi-sided markets. Some economists, including Nobel prize winner J. Tirole, have worked on the economics of *two- or multi-sided markets* (for instance payment systems allowing the match between merchants and buyers) and wrote about “platform competition” already more than 10 years ago.²⁸ D.S. Evans and R. Schmalensee provide the following (economic) definition: “*a digital multi-sided platform has two or more groups of customers who need each other in some way but who cannot capture the value of their mutual attraction on their own and rely on a digital ‘catalyst’ to facilitate value creating interactions between them*”. A multi-sided digital platform is usually characterized by a usage externality and a membership externality. A usage externality occurs when the digital platform is used to create a value increasing transaction between economic agents. A membership externality occurs when the value received by agents on one side depends on the size of the other side(s) of the digital platform. The proposed definition of the European Commission consultation document on platform regulation (Oct. 2015) also associates platforms²⁹ with the economic notion of two- or multi-sided markets. This is helpful for progressing in the understanding of their functioning. However, the Commission considers that certain platforms also qualify as intermediary/information service providers in the sense of the e-Commerce directive (2000/31/EC). Those online intermediaries cover technical operators, such as telcos offering mere conduit or caching services, and hosting providers (Art. 12 to 14 of the e-Commerce directive). While those intermediaries could be subject to special liability rules, it is important not to include them under the notion of platform, or the debate on platforms risks to lose focus.

b) Platforms and network effects. To explain the rapid expansion and dominance of some digital platforms, economic theory also underscores the strong network or external effects associated with those platforms. Economists identify digital platforms with strong externalities across the different sides of the platforms.³⁰ While economic research of multi-sided markets is currently ongoing and

²⁷ For instance, Theo Bertram, Google’s European public policy manager, considered that “*In the end, we are all platforms in some form or another.*” Therefore “*platform regulation is not a useful phrase*”. Of course, this is a *pro domo* position as Google strongly resists the various attempts to regulate its market power.

²⁸ J. C. Rochet and J. Tirole, *Platform competition in two-sided markets*, *Journal of the European Economic Association*, 2003.

²⁹ In this document, « ‘online platforms’ refers to an undertaking operating in two (or multi)-sided markets, which uses the Internet to enable interactions between two or more distinct but interdependent groups of users so as to generate value for at least one of the groups ».

³⁰ See Renaissance numérique, *Plateformes et dynamiques concurrentielles*, Sept. 2015 (<http://www.renaissancenumerique.org/publications/rn/actualites/765-plateformes-et-dynamiques-concurrentielles> accessed on Dec. 28, 2015).

many important questions still go unanswered³¹, it is by now clear that *digital* (multi-sided) platforms pose new challenges to the economic (and legal) analysis of competition on these markets.

Beyond the differences relating to the items to which the platforms give access, it might be useful to better distinguish various types of platforms. The analysis of the functioning of platforms, selected on the basis of their characteristics, can help to differentiate the economic effects generated and to assess whether (and how) those platforms, or some of them, should be regulated.

c) Market power and bi- or multi-sided markets. The European Commission's *Digital Single Market Strategy* considers that 'some platforms' have a 'growing market power' and that there is a special 'way they use their market power' (p. 11). It appears more complicated to assess possible anticompetitive behavior on those bi/multi-sided markets. First of all because some of them are offering free services to consumers, which means that the standard competition criterion of excessive pricing cannot apply. On those platforms, efficiency is probably not always achieved when prices equal marginal costs and skewed prices or cross-subsidies might be required for efficiency purpose. This complicates the economic analysis necessary to assess the anticompetitive behavior and dominance of companies. Second, the criterion for abusive conduct (required for the application of Article 102 of the TFEU) should not only focus on the impact on prices only, but also take into account the reduction in the freedom of choice for the users of the platform (whether on the buyer or seller side). However, most platforms increase the choice of users.

In addition, multi-sided digital platforms complicate market definition and market power analysis, making the determination of the optimum level of competition more arduous. This, in turn, renders the definition of the right policy (and the eventual remedies) for deterring anticompetitive behavior all the more challenging. Traditional tools (e.g. the popular SSNIP³² test) used by antitrust authorities to define the relevant market, the first but crucial step needed to assess market power, are no longer meaningful in multi-sided markets. Indeed, traditional market definition tests only look at the effects of a price change on the demand in one side of the market/platform(s), without taking into account the effect on the demand for the other side(s) of the market. It is thus not easy to translate the teachings of the economic theory of multi-sided platforms into competition law and policy³³.

d) Swiftiness of market expansion. Major platforms constantly revise the boundaries of their activities and try to enter related areas. This is typically the case with major platforms such as Google and Uber. Google has expanded its services well beyond general search to price comparison services (Google Shopping), maps (Google Maps), content aggregation (Google News, YouTube, Google Books (now part of Google Play), ...), e-commerce (Google Play), not to speak of its role in the smartphone sector (through Android, its operating system, but also its own devices), in telecoms (Google Fiber), in the automobile sector (the connected cars) or other connected devices (the Google glasses), etc. More recently, Uber, on top of its UberPop and UberX (SUV, LUX...) riding services, has proposed UberCopter for sharing helicopter rides and is experimenting other services such as the delivery of objects (UberCargo), of meals (UberEats) or even of Christmas gifts or free meals for charities.³⁴ The rapid mutation of platforms and the multiplication of platforms by major operators reduce the validity of a static typology of platforms and require to take into account the combined effects of

³¹ See for instance the presentation of Jean Tirole at the Oct. 13, 2015 Financial Times-ETNO summit: <https://live.ft.com/Events/2015/FT-ETNO-Summit-2015>.

³² SSNIP stands for 'small but significant non-transitory increase in price'.

³³ See D. Auer and N. Petit, *Two-Sided Markets and the Challenge of Turning Economic Theory into Competition Policy*, Working Paper, 2015 (available on : <http://ssrn.com/abstract=2552337>).

³⁴ The offer of Uber to deliver some Christmas meals for a non-profit association (*Les restos du cœur*) created some harsh criticisms in Brussels. Through those initiatives, Uber aims at improving its reputation, while its business focus is clearly not the non-profit sector; on the contrary, its aim is firstly to reap revenues from the high end services (limousine or helicopter transport) which target a rich clientele without much concern for social or environmental issues.

various platforms. For instance, the link between the general web search platform of Google and its specialized aggregation or comparison services, such as Google News, YouTube or Google Shopping, has to be factored in the economic analysis. Similarly, the development of UberCopter will be facilitated by the complementary Uber VTC services from the heliport to the final destination of the traveller, etc.

e) Enhanced competition through platform partnerships. However, the competition analysis is complex, and other aspects tend to show that the platform market power is also contestable. For example, to oppose the Uber dominance, several competitors in particular on the U.S. and Asian markets, e.g. Lyft, Didi Kuaidi, Ola and GrabTaxi, have recently announced a global partnership offering cross-app service so that clients of one of the partnering companies, while travelling to other countries covered by the agreement, will be able to use the app of their country of origin.³⁵ Through this agreement, companies will first « gain access to new international consumers, without having to adapt their offer (e.g., the language or interface of the app). This allows them to save resources by leveraging on the strength of their partners in their respective markets. Second, companies do not lose track of their clients when they travel to other countries. This gives companies access to new data and ultimately additional insights into consumer preferences. »

III. Legal challenges, possible responses and areas for focusing the regulatory efforts

Our view is that legal disruption is not an accident of the platform economy, it is a core feature.³⁶ Digital platforms obviously challenge the law, and this is a key feature and consequence of their operations. They like to show how the law is out-of-date with the new economy, and they even appear alien to the law. Indeed, they tend to negate the territorial aspect of the (State) law. To be constrained by rules applicable on a national territory appears an anachronism for platforms which have a global perspective and outreach.³⁷ In addition, those platforms, typically U.S.-based companies, are sophisticated operators which regularly use legal engineering, for instance to minimize their tax burden – the disruption of tax perception, one of the traditional functions of national States, appears also programmed in many platforms' genes.³⁸ (There is however one area of the law where platforms seem to reinforce the traditional function of the State: the area of security with the enhanced surveillance of citizens they permit and contribute to, although they officially show some reluctance to the exploitation of their data to fight crime and terrorism.)

³⁵ See the article on our blog IPdigit by E.-M. Scholz, *Taking on Uber*, 19 Dec. 2015 (<http://www.ipdigit.eu/2015/12/taking-on-uber/>).

³⁶ We thus agree with O. Lobel, *The Law of the Platform*, (draft paper), Sept. 2015. (« more often than not legal disruption by the platform economy should be viewed as a feature not a bug of regulatory limits »).

³⁷ The attempts by Google to systematically avoid the application of foreign laws outside the U.S., especially in the field of copyright and data protection, is exemplary in this regard. The May 2014 decision of the Court of Justice of the EU in the *Google Spain* case (C- 131/12) on the « right to be de-linked » (wrongly named the « right to be forgotten ») is a clear and encouraging reaffirmation of the primacy of the law of the EU (and of its Member States) and their applicability to Google's activities and data processing in Europe (see A. Strowel, « Le droit à l'oubli : mal nommé, mal défini, mais bienvenu », in *Emile et Ferdinand, Gazette du groupe Larcier*, 2014, n° 7, p. 4-8 ; E. Cruysmans and A. Strowel, « Un droit à l'oubli face aux moteurs de recherche : droit applicable et responsabilité pour le référencement de données 'inadéquates, non pertinentes et excessives' », *J.T.*, 2014, p. 457-459).

³⁸ The tax rulings negotiated by some platforms with national tax authorities could be a form of state aid prohibited under Article 107 of the TFEU. Several investigations of DG Competition are on-going. See on the autonomy of Member States and regional and local authorities: E. Traversa, *Is there still room left in EU law for tax autonomy of Member States' regional and local authorities?*, 20 *EC Tax Review*, 2011, p. 4-15.

The public consultations initiated by the European Commission and the UK House of Lords³⁹ at the end of 2015 aim to assess “whether existing regulatory tools are sufficient to tackle the problem, or whether new tools need to be developed”.⁴⁰ Again, what ‘existing’ and ‘new tools’ means is not defined in the questionnaires used for the ongoing consultations. We try to go a bit further in the comments below.

Beyond the above-mentioned basic mismatch (or even clash of cultures) between the law and the online platforms, most platforms are challenging specific laws (data protection, labor law, competition law, copyright, etc.) and authorities (competition authorities, data protection authorities, judiciary, etc.). Let us present a few early thoughts.

A. Preliminary issues

1. The landscape of the regulatory authorities: need for redesign?

Some observers (especially in France) have claimed that new regulatory authorities should be designed at EU level, especially because those platforms are difficult to connect with a territory and national laws are not a good fit. We are convinced that creating a new body is often not a real solution. The idea supported by the French-German digital summit (Oct. 2015) to create a rating agency for platforms⁴¹ seems not convincing at first sight. At the same time, to consider that the legal framework contains already a remedy for all issues⁴² is not correct either.

The piecemeal approach in certain sectors (for ex. the numerous Data Protection Authorities or DPAs, sometimes within a single Member State as in Germany) is an obstacle to an adequate and effective regulation. On the data protection front, the General Data Protection Regulation (GDPR), on which the EU institutions found a political agreement (Dec. 15, 2015), will have a direct effect contrary to the existing directive, but the “one-stop-shop” concept initially envisaged to ensure that companies have to deal with only one DPA has been replaced by a complex system involving a ‘lead’ DPA and possibly several ‘concerned’ DPAs.⁴³ This is not the best framework for dealing with global operators.

The regulatory response is easier in the fields where there is a EU competence and authority (such as DG Competition). On the contrary, where there is no special agency but only the courts, such as for the national consumer or copyright laws, there is often no easy way to reconcile the sometimes diverging approaches at national level. Where there is a core EU law element though, the Court of Justice of the EU (CJEU) can impose its interpretation through a preliminary ruling. While the CJEU has sometimes taken very seriously its harmonizing role in interpreting the law, such as in the data protection field with its two rulings on the “right to be forgotten”⁴⁴ and the “Safe Harbor”⁴⁵, both

³⁹ See above the last footnotes of the introduction to this contribution.

⁴⁰ European Commission, *A Digital Single Market Strategy for Europe*, COM(2015) 192 p. 11-12, also quoted in the UK House of Lords Call for Evidence (prepared by the Internal Market Sub-Committee) available on <http://www.parliament.uk/business/committees/committees-a-z/lords-select/eu-internal-market-subcommittee/news-parliament-2015/online-platforms-inquiry-launch/>.

⁴¹ This idea supported by the French Conseil national du numérique (see above the reference to the report *Ambition numérique*) is for instance discussed by S. Roland, *Une agence de notation des géants du net, une fausse bonne idée ?*, *La Tribune*, 26 June 2015 (<http://www.latribune.fr/technos-medias/internet/une-agence-de-notation-des-geants-du-net-une-fausse-bonne-idee-486278.html>).

⁴² T. Pénard and W. Maxwell, *Réguler les plateformes : une fausse bonne idée*, *L’Opinion*, 23 April 2015 (If we agree that an anti-platform arsenal is not opportune, we equally oppose the conclusion of those authors: « En réalité, chaque mal possède déjà son remède »).

⁴³ The lead DPA is the DPA with jurisdiction over the controller or processor’s « main establishment ».

⁴⁴ CJEU, 13 May 2014, C-131/12, *Google Spain v AEPD and Mario Costeja Gonzalez*.

⁴⁵ CJEU, 6 Oct. 2015, C-362/14, *Maximilian Schrems v Data Protection Commissioner*.

important for online platforms, in the area of copyright for instance, the responses are often too vague to ensure a converging view by the national courts which ultimately have to rule on the cases.

Whether there is or not a EU agency, the national regulatory authorities have learned to collaborate: this is the case with national competition authorities, collaborating sometimes together with DG Comp, or with the DPAs through for instance the Article 29 Working Group (which released many interesting opinions dealing with digital platform issues, such as on search engines, Big Data and the use of personal data as a competitive factor).⁴⁶

2. Ex ante v. ex post regulation: what is more effective and should be preferred?

Another issue is whether regulation should operate ex ante or ex post. Telecom operators which are subject to ex ante regulation are pleading for an adapted ex ante regulation applicable to what they call the OTTs, the Over The Top operators which rely on their infrastructure to deploy new services and to generate value (Google, Facebook, etc.). It is far from clear that this is a workable solution for global players which do not play within the same perimeter as the traditional telecom carriers in Europe.

Competition law operating ex post can effectively regulate the market, by prohibiting some conduct or limiting some acquisitions of rivals on the basis of broad legal provisions that can apply to various anticompetitive behaviors. There is however the need to better take into account the role of data (accumulation) as a competitive factor and a means to increase dominance (see below). Competition law also has the advantage that there is an authority at EU level with real teeth (fines up to 3% of the worldwide turnover of the company found in breach of competition rules).

That said, one cannot rely solely on competition law to solve the issues raised by the online platforms: indeed, they challenge many laws protecting not only the competitors and the consumers (the objective of competition law), but as well some categories of beneficiaries such as the workers, the creative contributors and individuals (the aims of labor, copyright and privacy laws; see below).

B. Identifying the areas and the level of competence for possible regulatory intervention

A legitimate question is whether some laws challenged by the platforms must be amended (or repelled) and whether (new) regulation is needed or not. While some regulation is needed, the responses vary depending on the type of regulation involved. The level of competence (local, national or EU) also greatly varies.

Regarding the relevant domains of the law for the regulation of platforms, there might be at least five types of laws which need a different treatment by legislators and regulators to deal with the platform economy and the new globalization it brings about.

1. Market access and other constraints for operating services in the sharing economy: a role for local and national authorities

Some regulations, such as the rules regulating licensed operators (for ex. the taxi companies) and restricting new entrants, have to be (thoroughly) adapted to take into account the positive aspects of the digital platforms and of the 'sharing economy', which includes the community exchanges. Local authorities have here to intervene and adapt the conditions for licensing some of the services offered by the global platform operators and the existing operators (the taxi companies), but as well

⁴⁶ See the Opinions and recommendations of the Article 29 Working Party available on http://ec.europa.eu/justice/data-protection/article-29/documentation/opinion-recommendation/index_en.htm .

facilitating new forms of collaborative initiatives. This applies to mobility services for instance. Accommodation or food catering services are also concerned⁴⁷, although the rules to be adapted could exist at a higher level (for ex. some tax rules or the rules on food safety might be defined at national or EU level).

2. Protective laws: their preservation and adaptation are mainly in the hands of national authorities, but EU law could rule at the margin

A second broad category of *ex ante* laws covers, among others, laws protecting workers, consumers, authors or autonomous individuals. Those laws are usually defined at national level. All those laws have in common to protect individual persons (and small operators) against their counterparts in various transactions: labor laws (and social security rules) protect the employees, consumer rules the acquirers of goods/services, copyright the creative contributors, data protection and privacy laws the autonomy of individuals. Some of the rules embedded in those laws also guarantee their beneficiaries an adequate remuneration or fair counter-value for their input, and thus play a role as redistributive tools (this is quite clear with labor law and copyright law).

Although the objective here could be to preserve the guarantees offered by labor law, consumer law, copyright law or privacy law, some legal adaptation is also needed, in part to ensure the long term sustainability of the protective systems and also to respond to the new opportunities and to the new demands (flexibility, etc.) created by the platform economy. On one side, there is a need to ensure the effectiveness of the existing rights (thus new enforcing mechanisms should be devised, relying not only on sanctions but on incentives and ‘nudging’); on the other side, a more flexible framework would be welcome.

Some of those changes have to be defined and implemented at national level, for instance in labor law. In the fields of consumer, copyright or data protection, more could be done at EU level.

3. Competition law: an extended toolbox exists, but could be better used by competition authorities to ensure a timely enforcement of competition rules

Competition law which applies horizontally and *ex post* falls in a third category: the law itself does not require to be fundamentally adapted, in part because a strong competition authority exists at EU level, on top of the collaboration between national authorities. Nonetheless, the enforcement of competition law requires to better take into account the power and swiftness of data accumulation by online platforms. Competition authorities still seem to somewhat neglect the market power of companies which collect data in exchange for free services or which earn huge revenues from one side of the market (for ex. the advertiser’s side) to subsidize the free access of users to online content on the other side of the market.

A regular criticism is that competition decisions come too late for digital markets which evolve rapidly (the 2004 Microsoft decision of DG Competition is often quoted as an illustration). It is indeed correct, but the simple possibility for the Commission to impose high fines is sometimes an important parameter for the regulatory game (the ongoing investigations of Google might partly explain the less aggressive stance adopted more recently by Google on certain markets). Competition law could as well come too early, and prevent innovative market solutions to develop. The right timing is of the essence of the right intervention.

Competition law offers other means than full-blown investigations to influence and reshape the activities of dominant operators on fast-moving markets: the possibility for the competition

⁴⁷ The city of Amsterdam for instance found an agreement on the provision of accommodation services through Airbnb which looks interesting in the way it defines the conditions. What is interesting about the conditions ?

authorities to negotiate *commitments* from dominant operators, as in the Booking.com case⁴⁸, as well as *settlements* belong to those tools. The toolbox could still be further developed. For instance competition authorities could rely more often on proceedings for *interim measures*.⁴⁹

4. Tax law: adaptations are needed, but most changes are required by the globalization of the economy, not specifically by digital platforms

Complex enforcement issues also appear in the field of tax law. The taxation of global platforms/companies relying on complex base erosion and profit shifting (BEPS) strategies are now under scrutiny of the OECD and its members. Another issue is caused by the complexities in the taxation of cross-border digital services and e-commerce (VAT/GST issues). Arguably more changes to tax law are required than for the application of competition law which is already partly fit for dealing with cross-border operations. But most of those necessary changes (except the VAT rules for e-commerce?) should not specifically address digital platforms, but all global companies. The legitimate ambition to tax profits where they are made is a horizontal tax issue, although the definition of a taxable presence is even more complex when the companies are digital players and the operations take place in the cloud.

Therefore, tax rules are probably not the main issue to focus on for regulating online platforms, despite the fact that some changes are needed to develop the start-ups⁵⁰ and local community exchanges and to ensure a reasonable tax collection for the part-time activities made possible by the digital economy (Indeed, the existing tax rules are not good at handling short term contracts, part-timers, low pay, self-employment, etc.)⁵¹.

5. Laws on data (ex post and ex ante regulation): a thorough definition of the conditions for accessing and protecting data is needed

There is a fifth category of laws which are still under construction, and where a lot more needs to be done: the laws on data. The fact that digital platforms exploit huge quantities of data, including personal data, raises new issues usually not well taken into consideration in the reasoning of regulatory authorities. The increasing importance of data as a component of the digital economy has to be factored in the analysis of competition law for instance.⁵² Accessing more data because of an enhanced transparency obligation (for ex. on tax rulings and the practice of “price transfers”) could

⁴⁸ This case was handled by French Competition Authority in coordination with the European Commission as well as the Italian and Swedish competition authorities (see Decision 15-D-06 of 21 April 2015 concerning practices implemented in the online hotel booking sector and the summary of the commitments from Booking.com : http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=607&id_article=2535).

⁴⁹ See the remarks by B. Laserre, President of the French Competition Authority, *La régulation des plateformes numériques*, Contributions to the conference organised by the Chaire Innovation et Régulation, Orange, Telecom Paris Tech, 7 April 2015, p. 28. Bruno Laserre underlines that the French competition authority is the sole in Europe to use the tool of interim measures (to be implemented within 3 to 4 months). See for instance the *Google v. Navx* decision of 30 June 2010 ordering Google to implement in an objective, transparent and non discriminatory manner the content policy of its AdWords service.

⁵⁰ France and Germany are contemplating the creation of common fiscal (and social) regime adapted to innovative start-ups (see *Les 15 propositions franco-allemandes pour une transformation numérique de l'Europe, L'usine digitale*, 27 Oct. 2015, available at <http://www.usine-digitale.fr/article/les-15-propositions-franco-allemandes-pour-une-transformation-numerique-de-l-europe.N359345>).

⁵¹ See N. MacErlean, *Property levies would ease the robot attack on income tax*, *Financial Times*, 4 Jan. 2016.

⁵² The European Data Protection Supervisor already stressed this issue in its Preliminary Opinion on *Privacy and competitiveness in the age of big data : The interplay between data protection, competition law and consumer protection in the digital economy*, March 2014 (available at https://secure.edps.europa.eu/EDPSWEB/edps/Consultation/big_data). See also D. Geradin and M. Kuschewsky, *Competition Law and Personal Data : Preliminary Thoughts on a Complex Issues*, in *New frontiers of antitrust 2013*, Bruylant, 2013.

as well redefine the impact of existing regulation (the fight against BEPS (Benefit Erosion and Profit Shifting) strategies in the tax area relies largely on enhanced access to tax data).

a) Taking into account the role of data (collection and sharing) in the ex post analysis. Many digital platforms generate a lot of value from the extraction and use of information originating from the large datasets they have collected on the basis of the free input of the platform users (e.g. Facebook). While other providers could potentially obtain (collect) the same information, it is not clear how they could do so when there is no other widely used platform. The absence of data portability is a factor for assessing the competitive power of a platform.⁵³ In this case, the application of competition law might be prevented or made difficult as most online platforms « do not trade data as a stand-alone product as a result of which no supply and demand exists and no relevant product market for data can be defined under current competition law standards ». ⁵⁴ This issue could possibly be fixed under competition law if it can address issues beyond the relevant markets for the services provided to the platform users : « By defining a wider market for data, a form of potential competition can be taken into account whereby market players also compete for the asset that is used as an input to develop or improve services offered on online platforms ». ⁵⁵ This may require to classify digital data as a 'sui generis' information relevant for competition law purposes. In a sense, digital datasets can be considered as specialized assets. As such, digital data are not necessarily competitively neutral. Data-sharing, for instance, between digital platforms may create competition concerns as it may decrease the chances of existing or potential platforms to extract value from these data which they can use to improve the services they offer and/or innovate. Thus, digital data sharing is akin to R&D cooperation between firms, a practice that usually falls under the 2011 Commission's Guidelines on Horizontal Co-operation Agreements. ⁵⁶

b) The ex ante regulation of data. The laws of data as considered here not only covers the protection of personal data (already addressed above, and just recently updated with the GDPR), but various partly connected issues which are not only important for regulating large digital platforms, but also for promoting the uptake of the digital start-ups relying on Big Data: those issues comprise

- the portability of data over platforms (for individuals and companies),
- the access to (private) data sets in favor of public authorities (for the definition of public policies),
- the rules on Open Data (originating from the public sector and from which private companies should benefit),
- the new exceptions to intellectual property, such as the text and data mining exception within copyright⁵⁷,
- the exceptions to trade secrets protection contained in the Nov. 2013 draft directive still under discussion⁵⁸,

⁵³ In *The Facebook Effect*, David Kirkpatrick already underlined "that most users are not going to take the time to create multiple profiles for themselves on multiple social networks [and] ... that once consolidation begins on a communications platform it can accelerate and become a winner-take-all market" (Virgin books, 2010, p. 275-276).

⁵⁴ See Graef (2015), *Market Definition and Market Power in Data: The Case of Online Platforms*, *World Competition* 38, No 4, p. 473-506.

⁵⁵ *Idem*.

⁵⁶ Marinucci and Vergote (2011) have studied networks of R&D cooperation and shown that R&D network formation may act as a barrier to entry to the market for innovation (*Endogenous Network Formation in Patent Contests And Its Role as A Barrier to Entry*, *Journal of Industrial Economics*, vol. 59(4), p. 529-551).

⁵⁷ This issue is specifically mentioned in the Dec. 9, 2015 Commission's Communication, *Towards a modern, more European copyright framework*, COM(2015) 626 final.

⁵⁸ See europa.eu/growth/industry/intellectual-property/trade-secrets/index_en.htm.

- the revision of existing sui generis protections for datasets (such as the extraction and re-utilization rights defined by the 1996/9/EC Database directive),
- the issue of 'data commons', etc.

While for the telecommunications market, legislators have imposed a priori obligations (for ex. the universal service), it remains to be enquired whether comparable obligations (for ex. regarding the availability of data of common or public interest) would make sense in the field of online platforms. For instance, the data collected by Uber on its users could be valuable for defining a mobility policy for a city⁵⁹. But one can expect that platforms, relying on the intellectual property protection of their core asset (which could be protected by the database right or as trade secrets) will strongly oppose any legal obligation to make their data available. One should enquire whether there is a need to impose ex ante obligations in particular regarding the portability of data. This requires to reassess the boundaries of the intellectual property protections which apply to (personal) data, in particular the sui generis database right and the protection of trade secrets. The need to have a clear exception for data (and text) mining in the field of copyright will also have to be investigated.

c) Conclusions. A good balance of provisions allowing the access to many sorts of data while preserving some investments in data is hardly needed. With the on-going debate on the 2015 draft law for the "Digital Republic"⁶⁰, the French authorities seem ambitious in their attempt to revise the legal status of, and the access conditions to, various types of data. Many hurdles can be anticipated in France and at EU level if a similar attempt to reshape the legal framework for data is considered. It is essential that the European authorities intervene before too many diverging provisions on data access or protection are taken at national level, making it even more complicated to navigate the complex field.

In addition it appears essential that the European Commission sets a steering committee to follow the competing and possibly diverging initiatives popping-up around very different data-related issues (arising in the fields of privacy, intellectual property, competition, telecom, international trade, etc.) which are handled by different authorities and DGs within the European Commission (DG Growth, Competition, Connect, Trade, etc.).

The issues linked with data (including how they reinforce market power) are still a largely uncharted area where one could also expect a strong pushback by the digital platforms.⁶¹ There is another reason why one can expect major clashes in this area: the platform industry and some powerful States are advocating the free movement of data in international trade negotiations.⁶² It appears essential that the EU first better shapes its own laws on data before embarking on international agreements. This should also orientate the Commission's approach (DG Trade) in negotiating TTIP.

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⁵⁹ At peak time, many Uber drivers converge in certain neighbourhoods reinforcing traffic congestion. A sound transportation policy might require to access the data about cars and users' demands so as to possibly devise a special congestion fee or to better manage road traffic.

⁶⁰ See <https://www.republique-numerique.fr/>.

⁶¹ The overhaul of the personal data regime in Europe (which led to the political agreement between the Council and the European Parliament reached just before Christmas 2015) has generated a fierce opposition of powerful platforms such as Google and Facebook during the whole legislative process.

⁶² As is well-known, the free movement of data is a core provision of the newly agreed Trans Pacific Partnership (TPP) and it is advocated by those supporting the conclusion of the Transatlantic Trade and Investment Partnership (TTIP).

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