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The abuse of dominant position in digital markets: Google Shopping case

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Sintesi

Il presente studio si prefigge lo scopo di analizzare l'evoluzione della disciplina dell'abuso di posizione dominante in ambito *antitrust* nella sua interazione con la realtà dei mercati digitali, osservando l'applicazione dell'attuale disciplina, i potenziali punti critici, le prospettive di riforma e i diversi approcci possibili nei confronti delle medesime condotte.

Il primo capitolo ha l'obiettivo di ricostruire l'attuale disciplina applicabile in ambito comunitario agli abusi di posizione dominante nei mercati digitali e si divide in due sezioni: nella prima si cerca di ricostruire la realtà dei mercati digitali e le caratteristiche che, nel loro insieme, rendono necessario distinguerli dai mercati tradizionali; nella seconda si analizza invece l'applicazione della disciplina di cui all'art. 102 TFUE alle condotte degli operatori dei mercati digitali, individuando i requisiti per i quali potrebbero sorgere complicazioni e le possibili soluzioni applicative per garantire un elevato livello di tutela.
Relativamente alla prima sezione, viene tracciato il confine riguardante i soggetti che possono rientrare nella categoria di operatori dei mercati digitali, prendendo in considerazione la definizione normativa e l'interpretazione giurisprudenziale dei servizi della società dell'informazione, in particolare nel caso in cui questi si configurano quali servizi misti, rendendo dubbia la loro qualificazione giuridica (§ 1.1.1).
Viene poi approfondito il fondamentale ruolo delle informazioni e dei dati nel contesto dei mercati digitali, analizzandone le caratteristiche intrinseche, le diverse categorie di bene sotto cui possono essere ricondotti e le funzioni che svolgono nell'ambito dei *business model* degli operatori, cercando così di esporre le ragioni per cui rappresentano per loro una risorsa così importante (§ 1.1.2).
Vengono poi considerate le caratteristiche fondamentali dei mercati digitali, ossia quelle che li portano ad essere caratterizzati dalla presenza di pochi operatori di dimensioni estremamente rilevanti insieme a numerosi operatori di dimensioni medio-piccole (§ 1.1.3). Tali caratteristiche sono in particolare individuabili nella presenza di forti economie di scala e di effetti di rete, con i conseguenti effetti *tipping* e *lock-in*. L'operare

congiunto di tali effetti porta spesso ad una situazione in cui "il vincitore prende tutto", nella quale l'operatore che è riuscito a prevalere nella competizione iniziale, creando una propria rete rilevante di utenti, ha la possibilità di instaurare una posizione dominante piuttosto solida sul mercato di competenza. Tuttavia, tali aspetti sono controbilanciati dalla natura fortemente innovativa dei mercati digitali, che può condurre a rapidi sconvolgimenti degli equilibri e alla nascita di nuove posizioni dominanti a discapito degli operatori precedenti. Altri elementi caratteristici particolarmente rilevanti ai fini dell'analisi *antitrust* delle condotte degli operatori dominanti nei mercati digitali sono la natura multilaterale delle piattaforme e degli operatori che vi operano e la presenza di numerosi servizi offerti agli utenti a costo zero (§ 1.1.4). Questi elementi aumentano di non poco la complessità delle considerazioni che autorità della concorrenza e giudiziarie si trovano a dover compiere quando si interfacciano alla realtà dei mercati digitali.

Una volta individuate le caratteristiche peculiari dei mercati digitali, nella seconda sezione si passano a considerare le conseguenze che tali caratteristiche comportano nell'applicazione dell'art. 102 TFUE. A tal fine, i vari elementi della definizione normativa di abuso di posizione dominante vengono fatti scontrare con la realtà dei mercati digitali, così da comprendere le possibili difficoltà applicative e le eventuali soluzioni già adottate dalle autorità *antitrust* e dalle corti o che potrebbero essere adottate al fine di evitare vuoti di tutela e garantire alti livelli di protezione della concorrenza e dei consumatori.

Le condotte che possono essere adottate dagli operatori dominanti nel contesto dei mercati digitali sono spesso nuove e difficilmente comparabili rispetto a quelle che vengono normalmente ricondotte nel novero di condotte abusive. L'analisi inizia per questo motivo dalla definizione di abuso, di cui vengono individuati gli elementi necessari, così da poter delineare dei confini il quanto più chiari e precisi possibile da utilizzare, e le possibili implementazioni, anche con riguardo alle possibili finalità che dovrebbero essere ricondotte al diritto della concorrenza (§ 1.2.1).

La definizione di abuso di posizione dominante di cui all'art. 102 TFUE è poi oggetto di analisi, individuando i singoli elementi che devono essere accertati per considerare una condotta all'interno del campo di azione della norma (§ 1.2.2). Particolare attenzione viene riservata a quegli elementi dell'analisi che, alla luce delle caratteristiche sopra descritte, più possono creare problemi. In quest'ottica, vengono approfonditi la definizione del mercato (§ 1.2.3), la definizione di posizione dominante (§ 1.2.4) e le teorie del danno (§ 1.2.5). Più nello specifico, i primi due elementi sono strettamente connessi in quanto la definizione del mercato rilevante è strumentale alla successiva definizione di una posizione dominante in tale mercato. L'analisi di entrambi tali elementi è fortemente condizionata dalla natura dei mercati digitali e dei servizi che lì vengono offerti. Tradizionalmente, lo strumento maggiormente utilizzato dalle autorità della concorrenza e dalle corti per delimitare il mercato rilevante, offrendo garanzia di oggettività dello standard decisionale, è stato lo "*small but significant increase in price test*" (SSNIP test). Tuttavia, alla luce dell'offerta di numerosi prodotti e servizi gratuiti, per i quali il prezzo pagato dagli utenti non è rappresentato da un importo, ma consiste nel loro tempo,

nei loro dati personali e nella loro appartenenza alla rete, un'analisi di questo tipo risulterebbe inefficace e porterebbe a risultati non rispondenti alla realtà. Per di più, pur in presenza di un prezzo, i mercati multilaterali rendono l'analisi degli effetti legati al cambiamento del prezzo molto più complessa, dato che al tradizionale studio riguardante il comportamento dei consumatori in caso di aumento del prezzo è necessario sommare la considerazione degli ulteriori effetti dovuti alla correlazione fra i molteplici versanti del mercato. Per questo motivo, è opportuno, e in qualche modo necessario, individuare strumenti ulteriori per rispondere a questa esigenza, avendo maggiore riguardo agli aspetti qualitativi dei prodotti e servizi offerti.
Le caratteristiche dei mercati digitali influiscono anche nella definizione della posizione dominante, rendendo necessario il fare riferimento a nuovi parametri per valutare il potere di mercato di un operatore nel mercato rilevante. Ad esempio, la metodologia di calcolo delle quote di mercato, tradizionalmente basato sulla percentuale delle vendite realizzate, richiede un adattamento alle peculiarità dei mercati digitali, in cui i servizi vengono offerti a costo zero, così come devono essere approntate delle modifiche alla valutazione che si può ricollegare a quelle quote. L'analisi delle barriere all'ingresso, rappresentate in particolare dagli effetti di rete, dai costi di commutazione e dal possesso di grandi quantità di dati, diviene particolarmente significativa. La natura dei mercati digitali rende complessa anche l'acquisizione di quei dati che sono necessari ai fini dell'accertamento di una posizione dominante da parte delle autorità *antitrust*, rendendo in tal modo opportuno l'utilizzo di un approccio olistico, comprensivo di una necessaria stretta collaborazione da parte dell'impresa sotto investigazione, per l'effettivo raggiungimento del fine dell'individuazione della posizione dominante.
L'ultimo problematico elemento applicativo considerato è quello delle teorie del danno, che pur non facendo parte dei requisiti di cui all'art. 102 TFUE, che costituisce una clausola aperta, svolge un ruolo di fondamentale importanza nell'applicazione della disciplina. Infatti, l'individuazione di test legali ben definiti per la definizione delle condotte abusive permette di raggiungere un livello di certezza applicativa, per le autorità della concorrenza ma soprattutto per le imprese che si trovano a decidere se implementare o meno una determinata condotta, se non necessario quanto meno auspicabile. Per questa ragione le condotte nate nei mercati digitali cercano di essere ricondotte, pur con alcuni adattamenti, alle tradizionali teorie del danno, così da individuare i requisiti che tali condotte devono rispettare per non essere considerate illegittime.

Nel secondo capitolo viene invece considerata l'evoluzione normativa in atto a livello globale sul tema dell'abuso di posizione dominante nei mercati digitali. La natura transfrontaliera degli operatori ha comportato un avvicinamento dei diversi sistemi giuridici che, pur ritrovando le proprie fondamenta in approcci estremamente diversi l'uno dall'altro, sono ora in fase di convergenza. A dimostrazione di ciò, vengono considerate le proposte di riforma presentate o attuate in Unione Europea, negli Stati Uniti e in Cina, tre ordinamenti caratterizzati da una tradizione giuridica in materia *antitrust* estremamente differenti fra loro. Ciò

ha comportato in passato esiti diversi nell'attività di *enforcement*, ma allo stato attuale tali realtà si stanno avvicinando, nella ricerca di una tutela effettiva ed efficace nel contesto dei mercati digitali.

Relativamente all'Unione Europea, la cui disciplina attualmente in vigore è stata considerata nel primo capitolo, viene analizzata la proposta di Regolamento del *Digital Market Act* (DMA). Il DMA rappresenta senza dubbio la proposta caratterizzata da maggiore organicità e si pone l'obiettivo di implementare un sistema di regole *ex-ante* che possa prevenire i comportamenti anticompetitivi degli operatori di maggiore dimensione, garantendo la contestabilità dei mercati digitali, la correttezza delle relazioni fra i grandi operatori e i loro utenti commerciali e di conseguenza un rafforzamento del mercato interno (§ 2.1.1). Il DMA sostituisce alla definizione del mercato rilevante e della posizione dominante, che, come analizzato in precedenza, creano non pochi problemi applicativi nell'ambito della disciplina di cui all'art. 102 TFUE, una designazione a priori e al tempo stesso elimina l'approccio basato sugli effetti, rimuovendo così l'onere di operare un bilanciamento degli interessi nei singoli casi. Infatti, ciò che viene in questo caso tutelato è la concorrenza come processo e non i concorrenti, così che l'attenzione viene spostata dagli effetti di breve a quelli di lungo periodo, attraverso l'imposizione di obblighi e divieti relativi a comportamenti i cui effetti, pur potendo non essendo negativi nell'immediato, nel tempo potrebbero rivelarsi controproducenti.

Il concetto fondamentale nella regolamentazione è quello di *gatekeeper*, dato che le regole imposte dal DMA si applicano a quelle imprese che sono state preventivamente designate come tali (§ 2.1.2). Per tale ragione vengono analizzati i criteri presi in considerazione, evidenziando le possibili criticità del processo. Vengono poi presi in considerazione gli specifici obblighi e divieti che vengono imposti sui *gatekeeper* e nel loro insieme vanno a costituire, per questi operatori, una speciale responsabilità più intensa e articolata rispetto a quella che grava generalmente sugli operatori dominanti (§ 2.1.3). In ultimo, viene analizzato il rapporto fra DMA e la disciplina di cui all'art. 102 TFUE, evidenziando la reciproca influenza fra le due normative (§ 2.1.4). Infatti, se da una parte le regole relative alle condotte dei *gatekeeper* cristallizzate nel DMA si sono formate e concretizzate nell'ambito dell'attività di applicazione dell'art. 102 TFUE da parte delle autorità della concorrenza, dall'altra l'attuale attività di contrasto degli abusi di posizione dominante si avvalgono dei concetti (tra cui lo stesso concetto di *gatekeeper*) mutuati dal DMA, pur costituendo questo allo stato attuale unicamente una proposta di regolamento, quando si trova ad interagire con operatori dei mercati digitali.

Mentre nel contesto dell'Unione Europea gli abusi di posizione dominanti nei mercati digitali sono già perseguiti con vigore e il DMA ha il solo scopo di adeguare i mezzi a disposizione delle autorità a tale particolare realtà, la situazione risulta essere piuttosto diversa negli Stati Uniti.

La situazione di partenza negli USA è infatti piuttosto differente (§ 2.2.1). La Sezione 2 dello Sherman Act punisce infatti la *monopolisation*, un concetto già di per sé meno ampio rispetto all'abuso di posizione dominante europeo. A ciò deve poi aggiungersi che la teoria economica accettata dalla giurisprudenza maggioritaria statunitense è quella della Scuola di Chicago, secondo cui le imprese non hanno una reale

capacità di accrescere il proprio potere monopolistico attraverso condotte unilaterali, non potendo danneggiare il benessere dei consumatori nell'interesse dell'efficienza. Queste teorie, che da una parte spiegano la repentina e significativa espansione di diverse imprese e il relativo aumento della concentrazione di mercato, dall'altra hanno comportato l'affermarsi di un approccio incentrato sul non intervento da parte delle corti statunitensi, che preferiscono non intromettersi nelle scelte commerciali delle imprese a meno che non vi sia una chiara prova della chiusura del mercato o di un danno arrecato ai consumatori. Proprio per questo motivo, sorprende particolarmente verificare che le attuali proposte di riforma legislativa in materia di diritto *antitrust* siano invece caratterizzate da una forte impronta interventista, muovendosi nella direzione della disciplina di stampo europeo. A dimostrazione di ciò, vengono considerate le principali iniziative, nate con l'obiettivo di offrire un nuovo punto di inizio all'attività relativa agli abusi di posizione dominante, con una particolare attenzione riservata alle condotte tenute nei mercati digitali (§ 2.2.2). Tali iniziative, piuttosto eterogenee fra loro, si pongono tutte il comune obiettivo di contrastare gli abusi degli operatori dominanti attraverso un approccio più incisivo e l'individuazione di strumenti più efficaci per il perseguimento di tale finalità. Ed è così che se alcune proposte cercano di consolidare unicamente la teoria per cui le condotte unilaterali degli operatori in posizione dominante possono essere dannose ed altre richiamano in modo rilevante l'impostazione del DMA europeo, altre ancora cercano di risolvere il problema alla radice attaccando direttamente i grandi colossi operanti nei mercati digitali, ipotizzando ad esempio misure per impedire ad un operatore di controllare un *marketplace* e, allo stesso tempo, competervi.

L'ultimo ordinamento che viene considerato è quello cinese, sviluppatosi in un contesto socioeconomico estremamente differente rispetto a quello liberale occidentale. In Cina, il diritto della concorrenza si è sviluppato solo in tempi recenti e il primo intervento organico per definire la disciplina della materia si è concretizzato solo nel 2007 (§ 2.3.1). Per di più, il governo cinese ha concesso, fino a pochissimi anni fa, una certa libertà agli operatori degli innovativi mercati digitali, così da non limitare la loro crescita, mentre i timidi tentativi di far accertare l'abusività di alcune condotte unilaterali degli operatori dominanti in tale settore attraverso iniziative di *private enforcement* avevano portato risultati tutt'altro che soddisfacenti. Anche in tale contesto però, l'esigenza di garantire tutela nei confronti delle condotte degli operatori dei mercati digitali ha portato all'adozione di alcune linee guida per le autorità della concorrenza che, sull'onda di tale introduzione normativa, ha dato avvio ad una nuova fase *dell'enforcement antitrust,* come dimostrato dalla rapida e significativa investigazione nei confronti del colosso Alibaba (§ 2.3.2).

Infine, nel terzo capitolo viene analizzato il caso che ha rappresentato una colonna portante per l'attività di accertamento della Commissione e la cui bontà delle innovative scelte di analisi della condotta e del contesto dei mercati digitali è stata confermata, in attesa della decisione finale da parte della Corte di Giustizia, dal Tribunale dell'Unione Europea nel novembre 2021: il caso Google Shopping.

Dopo aver ricostruito i fatti (§ 3.1.1), si passa ad analizzare gli aspetti di maggiore interesse delle decisioni relative a tale vicenda. Il provvedimento della Commissione rappresenta un tassello fondamentale nell'analisi della disciplina della concorrenza in tema di abuso di posizione dominante nei mercati digitali, in quanto nella sua attività l'autorità ha considerato per la prima volta l'abusività di una condotta di *self-preferencing* (§ 3.1.2), si è approcciata alla definizione del mercato rilevante utilizzando metodologie maggiormente adatte a ricostruire la realtà fattuale di un mercato complesso come quello delle ricerche *online* e dei mercati ad esso collegati (§ 3.1.3), e avvalendosi di un approccio innovativo anche nell'accertamento della posizione dominante di Google (§ 3.1.4). Vengono poi a questo punto considerati i motivi di ricorso presentati da Google dinnanzi al Tribunale dell'UE contestando la correttezza dell'accertamento compiuto dalla Commissione (§ 3.2.1). L'analisi di tali motivi è particolarmente interessante dato che Google ha tentato, inutilmente, di riportare l'attenzione sulle regole che si erano consolidate nell'attività di accertamento della Commissione e nella giurisprudenza delle corti europee nel contesto dei mercati tradizionali ma che non sono state considerate applicabili al contesto dei mercati digitali. Vengono anche considerate le questioni che sono state lasciate irrisolte dal Tribunale, fra cui la fondamentale definizione di un chiaro *test* legale per le condotte di *self-preferencing* (§ 3.2.2).
Un'interessante punto di riflessione sulle decisioni di Commissione e Tribunale dell'UE è offerta dalla circostanza per cui le medesime condotte sono state analizzate anche nel contesto statunitense, giungendo però a conclusioni totalmente differenti, in particolare nell'analisi delle efficienze prodotte dalla condotta di Google (§ 3.3).
Infine, viene ipotizzata l'applicazione delle regole stabilite nel DMA alle vicende del caso Google Shopping, offrendo così uno scorcio della futura attività di *enforcement* legata alle condotte unilaterali degli operatori dominanti dei mercati digitali (§ 3.4).

Executive summary

This dissertation sets out to analyse how the regulation surrounding the abuse of dominance has evolved in the antitrust field, focusing on digital markets. Alongside pointing out the current implementation of said practice, this research will shed light on its potential weaknesses and prospects for reform and the possible different approaches in regard to the same conduct.

The first chapter aims at reconstructing the current discipline applied at the EU level to the abuses of dominant position in digital markets and is divided into two sections: in the first one, an attempt is made to reconstruct the reality of digital markets and their characteristics which, considered together, make it necessary to distinguish them from traditional markets; in the second one, the application of the discipline of Article 102

TFEU to the conduct of digital market operators is considered, identifying the requirements in respect of which complications may arise and the possible enforcement solutions which may be implemented to guarantee a high level of protection.

Regarding the first section, the boundary is drawn with reference to the entities that may fall within the category of digital market operators, taking into consideration the normative definition and the case law interpretation of information society services, in particular when they are shaped as mixed services, making their legal qualification questionable (§ 1.1.1).

The fundamental role of information and data in the context of digital markets is then explored, analysing their essential characteristics, the different categories of goods under which they can be subsumed and the functions they perform within the operators' business models, thus attempting to set out the reasons why they represent such an important resource for them (§ 1.1.2).

The other fundamental characteristics of digital markets are then considered, namely those that lead them to be characterised by the presence of a few extremely large players together with numerous small to medium-sized players (§ 1.1.3). Such characteristics can specifically be identified in the presence of strong economies of scale and network effects, with the consequent tipping and lock-in effects. The combined operation of such effects often leads to a "winner takes all" condition, in which the operator that has managed to prevail in the initial competition phase, by creating its own users' relevant network, has the possibility of establishing a rather strong dominant position in the relevant market. However, these aspects are counterbalanced by the highly innovative nature of digital markets, which can lead to rapid shifts in the market balance and to the emergence of new dominant positions to the detriment of previous players. Other characteristic elements that are particularly relevant for antitrust analysis of the conduct of dominant players in digital markets are the multilateral nature of the platforms and operators operating therein and the presence of numerous services offered to users at zero price (§ 1.1.4).

These elements increase by no small degree the complexity of the considerations that competition authorities and courts have to perform when approaching the reality of digital markets.

The second section goes on to consider the consequences that these characteristics entail in the application of Article 102 TFEU. To this end, the various elements of the legal definition of abuse of dominant position are brought up against the reality of digital markets, to understand the possible enforcement difficulties and the promising solutions that have already been adopted by antitrust authorities and courts, or that could be adopted, in order to avoid protection gaps and ensure high levels of competition and consumer protection.

The conduct that may be adopted by dominant operators in the context of digital markets is often new and difficult to compare with the conduct that is normally categorised as abusive. For this reason, the analysis begins with the definition of abuse, the necessary elements of which are identified, so as to be able to delineate

boundaries to be used in the clearest and most precise possible way, and the potential implementations, also with regard to the possible purposes that should be brought under competition law (§ 1.2.1).

The definition of abuse of a dominant position under Article 102 TFEU is then analysed, identifying the elements that must be assessed to consider conduct within the scope of the policy (§ 1.2.2). Particular attention is paid to those elements that, in light of the features described above, are most likely to create issues. Keeping that in mind, the market definition (§ 1.2.3), the definition of dominance (§ 1.2.4) and theories of harm (§ 1.2.5) are examined in depth.

More specifically, the first two elements are closely linked in that the definition of the relevant market is instrumental to the subsequent definition of dominance in that market. The nature of the digital markets and the services that are offered there strongly condition both these elements. Traditionally, the tool most frequently used by competition authorities and courts to delineate the relevant market, guaranteeing the objectivity of the decision standard, has been the 'small but significant increase in price test' (SSNIP test).

However, considering the offer of numerous products and services free of charge, the price paid by users being represented not by money, but by their time, their data and their presence in the network, such an analysis would be ineffective and would lead to results that do not correspond to reality. Moreover, even in presence of a price, multi-sided markets make the analysis of the effects of price changes much more complex, since to the traditional study concerning consumer behaviour in case of a price increase it is necessary to add the consideration of further effects due to the correlation between the multiple sides of the market. Therefore, it is advisable, and to some extent necessary, to find additional tools to address this need, paying greater attention to the qualitative aspects of the products and services offered. The characteristics of digital markets also influence the definition of dominance, requiring referring to new parameters to assess the market power of an operator in the relevant market. As an example, the methodology for calculating market shares, traditionally based on the percentage of sales realised, requires adaptation to the peculiarities of digital markets, where services are offered at zero cost, just as changes must be made to the valuation that can be attached to those shares.

The analysis of barriers to entry, represented by network effects, switching costs and the possession of large amounts of data, becomes particularly significant. The nature of digital markets also makes complex the acquisition of the required data for the antitrust authorities to ascertain dominance, thus requiring the use of a holistic approach, including the necessity of close cooperation on the part of the undertaking under investigation, in order to effectively achieve the goal. The last problematic enforcement element considered is that of theories of harm, which, while not being part of the requirements of Article 102 TFEU, which provides an open clause, play a fundamentally important role in the application of the discipline. The identification of well-defined legal tests for the definition of abusive conduct makes it possible to achieve a level of enforcement certainty, for competition authorities but above all for companies that find themselves deciding

whether or not to implement given conduct, if not necessary at least desirable. Therefore, conduct arising in digital markets needs to be traced back, albeit with some adaptations, to traditional theories of harm, to identify the requirements that such conduct must meet not to be considered unlawful.

In the second chapter, the ongoing global regulatory evolution on the issue of abuse of dominant position in digital markets is considered. The cross-border nature of the operators has led to a progressive alignment of different legal systems, which, although based on very different approaches, are now converging. This is illustrated by the reform proposals presented, or implemented, in the European Union, the United States and China, three jurisdictions characterised by extremely different antitrust legal traditions. This has led to different enforcement outcomes in the past, but these realities are now converging in the search for effective and efficient protection in the context of digital markets.

With regard to the European Union, whose policy currently in force was considered in the first chapter, the Digital Market Act (DMA) regulation proposal is analysed. The DMA undoubtedly is the proposal characterised by greater organicity and sets itself the objective of implementing a system of *ex-ante* rules that can prevent the anticompetitive behaviour of the larger operators, guaranteeing the contestability of the digital markets, the fairness of the relations between the large operators and their business users and consequently a strengthening of the internal market (§ 2.1.1). The DMA replaces the definition of the relevant market and the assessment of dominance, which, as analysed above, create quite a few application problems within the framework of Article 102 TFEU, with an *a priori* designation and, at the same time, eliminates the effects-based approach, thus removing the burden of operating a balance of the interests in individual cases. In fact, what is protected by the regulation proposal is competition as a process and not competitors, so that the focus is shifted from short-term to long-term effects, through the imposition of obligations and prohibitions relating to conduct whose effects, while they may not be negative in the immediate term, could prove counterproductive over time.

The essential concept is that of gatekeeper, since the rules imposed by the DMA apply to those companies that have been previously designated as such (§ 2.1.2). Therefore, the criteria taken into consideration are analysed, highlighting possible critical aspects of the designation process. The specific obligations and prohibitions that are imposed on gatekeepers are then taken into consideration, as together they constitute a special responsibility for these operators which is more intense and articulated than that generally borne by dominant operators (§ 2.1.3). Finally, the relationship between the DMA and the discipline of Article 102 TFEU is considered, highlighting the mutual influence between the two policies (§ 2.1.4). In fact, if on the one hand the rules on gatekeeper conduct crystallised in the DMA were formed in the context of the enforcement activity under Article 102 TFEU, on the other hand, the current activity of counteracting abuses of dominant position

makes use of the concepts (including the very concept of gatekeeper) borrowed from the DMA when it interacts with operators in the digital markets, even though this is currently only in the proposal state.

While in the context of the European Union abuses of dominant positions in digital markets are already vigorously prosecuted and the DMA is only intended to adapt the means available to the authorities to this particular reality, the situation is rather different in the United States.

The starting point in the USA is in fact rather different (§ 2.2.1). Section 2 of the Sherman Act punishes monopolisation, a concept that is already less extensive than the European abuse of a dominant position. In addition to this, it must be added that the economic theory accepted by the majoritarian US jurisprudence is that of the Chicago School, according to which companies have no real ability to increase their monopolistic power through unilateral conduct, as they cannot harm consumer welfare in the interest of efficiency. These theories, which on the one hand explain the sudden and significant expansion of several firms and the related increase in market concentration, on the other hand, have led to the rise of a non-interventionism approach by US courts, which prefer not to interfere in firms' commercial choices unless there is clear evidence of market foreclosure or consumer harm. For this very reason, it is particularly surprising to see that the current proposals for legislative reform in antitrust law are instead characterised by a strong interventionist bias, moving in the direction of a European-style regulation. To illustrate that, the main initiatives are considered, originated with the aim of providing a new starting point for the work on abuses of dominant positions, with a particular focus on conduct in digital markets (§2.2.2). All these initiatives, which are rather heterogeneous, have the common objective of countering abuses of dominant operators through a more incisive approach and the identification of more effective instruments for the pursuit of this goal. Interestingly, while some proposals seek only to establish the theory according to which the unilateral conduct of dominant operators can be harmful, and others draw heavily on the European DMA approach, others seek to solve the problem at its root by directly attacking the large giants operating in the digital markets envisaging, for example, measures to prevent an operator from controlling a marketplace and, at the same time, competing in it.

The last system considered is the Chinese one, which developed in a socio-economic context that is extremely different from the liberal Western one. In China, competition law has only recently developed and the first organic intervention to define the discipline on the subject only appeared in 2007 (§ 2.3.1). Moreover, the Chinese government granted, until a few years ago, a certain freedom to the operators of the innovative digital markets, so as not to restrict their growth, while the timid attempts to have the abusiveness of certain unilateral conducts of dominant operators in that sector ascertained through private enforcement initiatives had brought far from satisfactory results. Even in this context, however, the need to ensure protection against the conducts of digital market players led to the adoption of certain guidelines for competition authorities which, in the wake of this legislative introduction, launched a new phase of antitrust enforcement, as demonstrated by the rapid and significant investigation against the colossus Alibaba (§ 2.3.2).

Finally, the third chapter analyses a case which constitutes a pillar for the Commission's investigations and whose innovative choices in analysing the conduct and context of digital markets were confirmed, pending the final decision by the Court of Justice, by the General Court of the European Union in November 2021: the Google Shopping case.

After reconstructing the facts (§ 3.1.1), the most interesting aspects of the Google Shopping decisions are considered. The Commission's decision represents a fundamental step in the competition law analysis on the abuse of dominant position in digital markets, since in its activity the authority considered for the first time the abusiveness of self-preferencing conduct (§ 3.1.2), it approached the definition of the relevant market using better-suited methodologies to reconstruct the factual reality of a complex market such as that of online searches and related markets (§ 3.1.3), and used an innovative approach also in ascertaining Google's dominant position (§ 3.1.4). The grounds of appeal filed by Google before the EU General Court challenging the correctness of the Commission's finding are then considered (Section 3.2.1). The analysis of these pleas is particularly interesting given that Google attempted, in vain, to bring back attention to the rules that had been consolidated in the Commission's inspection activity and in the jurisprudence of the European Courts in the context of traditional markets but that were not considered applicable to the context of digital markets. Issues that were left unresolved by the General Court are also considered, including the fundamental definition of a clear legal test for self-referencing conduct (§ 3.2.2).

An interesting point of reflection on the decisions of the Commission and the EU General Court is offered by the circumstance that the same conducts have been analysed also in the US context, reaching totally different conclusions, in particular in the analysis of the efficiencies produced by Google's conduct (§ 3.3).

Finally, the rules set forth in the DMA are applied to the facts of the Google Shopping case, thus offering a glimpse of future enforcement activity related to the unilateral conduct of dominant digital market players (§ 3.4).

Chapter 1: Abuse of dominance in digital markets

In order to understand how the competition policy, namely the abuse of dominant position rules, operates within the digital markets and how it should be applied, it is necessary first to identify the characteristics that make this category of markets so particular. Digital markets are far from the economists' dream of perfect competition, as it has been stated that there is rising concern that digital platforms (multi-sided markets that provide users with digital services, often for free in return for data) are gaining market dominance, distorting competition, and delaying innovation[1]. Indeed, digital markets require renewed attention in the analysis of Article 102 of the Treaty on the Functioning of the European Union ("TFEU") and in its enforcement, as it has been shown by several antitrust investigations on this matter, such as the ones into Google[2], Facebook[3] and Amazon[4]. In its 2021 Annual activity report, the European Commission, among the general objectives pursued throughout the year, has chosen to pursue the process of making Europe fit for the digital age because, in competitive markets, firms must innovate and become more efficient to prosper, and this applies in particular to innovation-driven and fast-moving digital markets. The Commission has defined the effective enforcement of the EU competition rules, together with regulatory reforms, as of vital importance in the digital transformation contributing to a resilient economic recovery of the EU[5]. The importance of digital markets is indeed still rising, and competition concerns with it.

1. Digital markets

A market is a place of commercial activity in which goods or services are bought and sold[6]. Digital markets, in which the confluence of supply and demand occurs based on digital information and communication technologies and in which digital goods, rights and services are the product, have become in the last years more and more critical, with an estimated 4.5% to 15.5% of global GDP (gross domestic production) being

[1] KAMEPALLI, RAJAN and ZINGALES, *Kill Zone*, 2
[2] European Commission, *Decision of 27.6.2017 AT.39740 - Google Search (Shopping),* 2017
[3] Bundeskartellamt, *Decision: Facebook, Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing, Case- B6-22/16*, 2019
The decision has been later confirmed by the Bundesgerichtshof in Facebook. Karlsruhe: KVR 60/19, 2020
[4] European Commission, *Antitrust: Commission opens investigation into possible anti-competitive conduct of Amazon. (AT.40462)*, 2019
and Autorità Garante della Concorrenza e del Mercato, Decision of 30 November 2021, *Case A528 - Amazon FBA*
[5] European Commission, *Annual Activity Report 2021 DG Competition,* 2022 [Online] Available at: https://ec.europa.eu/info/system/files/annual-activity-report-2021-competition_en.pdf [Accessed1 June 2022]
[6] GARNER and BLACK, *Black's law dictionary 9th ed.*, St. Paul, West, 2009

constituted by the digital economy in 2019[7]. These numbers have only increased in the last few years, in part due to the pandemic situation, and now operators of digital markets are firmly among the most significant and wealthiest companies in the world. In 2022, five companies operating and basing their business on digital markets (*i.e.* Apple, Microsoft, Alphabet, Amazon and Meta Platforms) were in the world's top eight most capitalised companies[8]. In Europe, over 10 000 online platforms operate in the digital economy, and over one million businesses use digital platforms to sell their goods or services[9]. However, out of this number, while the most significant share of the overall value generated by the digital markets is in the hands of a few prominent players, most platforms are small and medium-sized enterprises (SMEs)[10]. The key characteristics of the digital economy will be found to be the reason why a small number of big online platforms has such a strong position in the digital markets.

1.1 *Information society services*

Firstly, it may be helpful to consider which activities are to be included in the digital economy. Under Article 2(4) of the Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector ("Digital Markets Act") the digital sector is defined as "*the sector of products and services provided by means of or through information society services*"[11]. The latter are defined under point (b) of Article 1(1) of Directive (EU) 2015/1535 as any service normally provided *for remuneration*, *at a distance*, meaning that the service is provided without the parties being simultaneously present, *by electronic means*, meaning that the service is sent initially and received at its destination using electronic equipment for the processing (including digital compression) and storage of data, and entirely transmitted, conveyed and received by wire, by radio, by optical means or by other electromagnetic means, *and at the individual request of a recipient of services*, meaning that the service is provided through the transmission of data on individual request[12]. This definition is broad, including almost every service provided on the web, in which all three conditions of article 1(1) of the Directive 2015/1535 are met, such as apps, programs and many websites,

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[7] European Commission, *Commission Staff Working Document: Executive Summary of the Impact Assessment Report accompanying the document Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act)*, SWD (2020) 363

[8] Statista Research Department, *The 100 largest companies in the world by market capitalization in 2022*, 2022 [Online] Available at: https://www.statista.com/statistics/263264/top-companies-in-the-world-by-market-capitalization/ [Accessed 20 July 2022]

[9] European Commission, *Proposal for a Regulation of the European Parliament and of The Council on Contestable and Fair Markets in The Digital Sector (Digital Markets Act),* 2020/0374 (COD) and
European Commission, *Shaping Europe's digital future: Online platforms and e-commerce*, 2022 [Online] Available at: https://digital-strategy.ec.europa.eu/en/policies/online-platforms-and-e-commerce [Accessed 20 July 2022]

[10] Ibidem

[11] Digital Markets Act Proposal

[12] European Parliament and Council, *Directive of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (codification)*, 2015/1535

including search engines, social media platforms, online messaging or internet-based voice telephony services, online marketplaces, content streaming services online games, news or educational websites, and any websites offering other goods or services to users over the internet[13]. All these activities constitute a fundamental asset for the European and global economies. To give an example, e-commerce (which makes up just one of the several activities of the digital market) collects, within its own market in the EU, more than 500 million consumers and a volume of transactions of USD 602 billion. Already having such a huge impact, the average yearly raise rate of e-commerce is about 15% for domestic commerce and over 25% for e-commerce between different States, with its influence that will increasingly grow in the next few years[14].

However, the broad definition under Article 1(1)(b) must be carefully assessed and applied in real-world cases, and sometimes a few problems can arise.

The Court of Justice of the European Union had the opportunity to expand on this definition in at least three cases.

Firstly, the Court of Justice addressed the concept of 'mixed service' in the Ker-Optika case[15], in which it was stated that the service of providing contact lenses via the internet could be divided into two components. The first part, the sale of contact lenses that formed the online service, could be regarded as an information society service, falling within the scope of Directive 2000/31/EC, while the delivery of the product, forming the offline service, could not[16].

The second case was *Uber Spain*, in which the issue was represented by the intermediation service, the purpose of which was to connect, for remuneration, non-professional drivers using their own vehicles with people who wished to make urban journeys, using a smartphone application provided by Uber Technologies Inc[17]. The CJEU needed, in this case, to clarify whether, under the EU law, the services provided by Uber had to be regarded as information society services or transport services. While admitting that the intermediation service offered by Uber was, in principle, a separate service from the transport service comprising the physical act of moving persons or goods from one place to another using a vehicle, meeting in principle the criteria for classification as an 'information society service' as a service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services, the Court stated that the service

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[13] UK Information Commissioner's Office *Guide to Data Protection – Services covered by this code,* 2018 [Online] Available from: https://ico.org.uk/for-organisations/guide-to-data-protection/ico-codes-of-practice/age-appropriate-design-a-code-of-practice-for-online-services/services-covered-by-this-code/ [Accessed: 21st January 2022]

[14] FAIR, *Perspectives: The Delivery Preferences of European Online Shoppers*, 2019 [Online] Available from: https://www.digitalcommerce360.com/2019/05/09/the-delivery-preferences-of-european-online-shoppers [accessed on 21st January 2022]

[15] EU Court of Justice, Judgement of 2 December 2010*, Case C-108/09, 'Ker-Optika bt v ÀNTSZ Dél-dunántúli Regionális Intézete'*, ECLI:EU:C:2010:725

[16] PRASTITOU-MERDI, *The Notion of "Online Intermediation Services" Found in the New EUPlatform Regulation: Who Is Caught After All?,* in PRASTITOU-MERDI, SYNODINOU, JOUGLEUX and MARKOU, *EU Internet Law in the Digital Single Market*, 551

[17] EU Court of Justice, Judgement of 20 December 2017*, Case C-434/15, 'Asociación Profesional Elite Taxi v Uber Systems Spain, SL*', ECLI:EU:C:2017:981

offered by Uber was more than just an intermediation service[18]. The Court held that the company inherently linked the intermediation service to the offer of non-public urban transport services, relying on a two-element test[19]. In the first step of the test, the Court held that Uber was a market-maker because, without the use of the application provided by the company, the non-professional drivers would not have to be led to provide transport services and the persons who wished to make an urban journey would not have used the services provided by those drivers[20]. Secondly, according to the Court, Uber exercised a decisive influence over the conditions under which the service was provided, by determining at least the maximum fare, receiving that amount from the client and only later paying part of it to the non-professional driver of the vehicle. Furthermore, the company exercised control over the quality of the vehicles, the drivers and their conduct, keeping the power, in some circumstances, to exclude a non-professional driver from the service. Accordingly, the Court concluded that the intermediation service had to be regarded as an integral part of an overall service whose main component was the transport service and had to be therefore classified not as an information society service but as a service in the field of transport[21]. This decision of the Court showed that fulfilling the four cumulative conditions laid down in Article 1(1)(b) of Directive 2015/1535 is not enough for a service to be classified as an information society service, but other elements must be considered to conclude that particular service shall not be qualified under a different standard. It is then required to consider the relationship between the intermediation service offered and the final service provided.

The chance to further discuss the qualification of a service that fulfils the four conditions set for information society services came with another preliminary ruling in the Airbnb Ireland case[22].

This time the Court of Justice had to decide whether the services offered by Airbnb Ireland could be qualified as information society services or had to be considered an intermediation activity in property transactions. Following the Uber approach, the four cumulative conditions were examined and considered met, resulting in the Airbnb service being considered to constitute, in principle, an information society service under the definition of Article 1(1)(b) of Directive 2015/1535, as it was intended to connect, by means of an electronic platform, for remuneration, potential guests with professional or non-professional hosts offering short-term accommodation services to enable the former to reserve accommodation. Following the Uber reasoning again, however, the Court pointed out that even if an intermediation service which satisfies all of the conditions constitutes in principle a service distinct from the subsequent service to which it relates and must be classified as an information society service, that cannot be the case if the intermediation service forms an integral part

[18] Case C-434/15, par.34
[19] PRASTITOU-MERDI, *The Notion of "Online Intermediation Services",* 552
[20] Case C-434/15, par.39
[21] Ibidem, par.40
[22] EU Court of Justice, Judgement of 19 December 2019, *Case C-390/18, 'Airbnb Ireland'*, ECLI:EU:C:2019:1112

of an overall service whose main component is a service coming under another legal classification[23]. Unlike Uber, however, the Airbnb service was not considered to fall into this exception, given that the nature of the links between the intermediation and final services was not considered able to justify departing from the general classification of information society service. In order to prove this point, the Court examined the service provided using three criteria, namely the essential feature criterion, the market maker criterion and the decisive influence criterion.

Regarding the first criterion, the Court pointed out that the essential feature of the service was the creation of a list of places of accommodation, which was a feature benefitting both hosts who had accommodation to rent and people who were looking for them. Therefore, compiling the offers using a harmonised format, coupled with tools for searching for, locating and comparing those offers, could not be considered ancillary to an overall service coming under a different classification.

As for the second criterion, the Court did not consider Airbnb to be indispensable to the provision of accommodation services, from the point of view of both offer and demand, due to the presence of many other channels that could be used in order to achieve the same result, and therefore it was not regarded as a market maker. Finally, concerning the decisive influence criterion, the level of control enjoyed by Airbnb over the conditions under which its services were provided was evaluated. The Court stated that Airbnb did not set or cap the amount of the rents charged by the hosts using the platform, at most providing them with an optional tool for estimating the rental price, having regard to the market averages, but always leaving responsibility for setting the rent to the host alone, concluding that the company did not exercise a decisive influence.

As the result of the application of these three criteria, the Court of Justice held that such an intermediation service could not be regarded as forming an integral part of an overall service, the main component of which was the provision of accommodation, which would have a different legal framework applied[24].

It has been stated that some elements remain unclear, such as the market maker criterion, for which the decision as to whether a platform creates or merely expands or optimises the market will always be a matter of degree[25]. The decision should be nevertheless appreciated because the aim of the Court with Airbnb judgement was to end the uncertainty created after the Uber judgement as to the extent of the exclusion to services other than urban passenger transport from the rules established to regulate the information society services, with the main focus of the analysis being placed over the ability of the company to influence the people using the platform[26]. The result, however, is that considering the judicial approach taken by the Court of Justice, it can be stated that future decisions will be taken on a case-by-case basis[27]. This means that applying the four conditions

[23] Case C-390/18 par.50
[24] Ibidem, para. 52-57
[25] FERRO, *Uber Court: a look at recent sharing economy cases before the CJEU*, in 5 (1) *UNIO EU Law Journal* 68–75 (2019)
[26] PRASTITOU-MERDI, *The Notion of "Online Intermediation Services"*, 556
[27] Ibidem

under Article 1(1)(b) is insufficient to ensure that a service will be treated as an information society service and that any other legal framework will not be applied.
Considering that the services offered by the operators of the information society are often cross-cutting with other markets, several problems can arise in identifying the correct rules to comply with and, in particular, discerning the product and geographic market in which the service is provided.

1.2 *The new central role of information*

Digital platforms are the most significant data aggregators and beneficiaries of the so-called Information Digital Economy, operating at micro, macro, and mega levels in various formats and encompassing practically every area of human activity[28]. Indeed, as digital markets are information-based, an analysis of information as a product or service is required[29]. In the program 'Digital Economy of the Russian Federation', the digital economy is indeed the one "in which data in digital form is a key factor of production in all spheres of social and economic activity"[30]. It is then necessary to understand what information is and how it behaves. In networks, it is also possible to define information as 'any quantity that reduces uncertainty or introduces novelty in the context of a relationship structure or set of relationship structures'[31]. In the digital network economy, information is 'anything that can be digitalised – encoded as a stream of bits'[32].

There is currently a debate about the correct qualification of information as a good. It has been sustained that information acts as a public good, having a meagre cost of reproduction and at the same time being non-rivalrous and non-excludable[33].
Information is traditionally considered a nonrival good because its consumption by one person does not make it any less available for consumption by another. Once such a good is produced, no more social resources need to be invested in creating more of it to satisfy the next consumer[34].
The truth is, however, that information can, and sometimes shall, be also categorised as a commodity, susceptible to becoming the object of a contract or an intellectual property right. In fact, despite the possibility

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[28] YUDINA and GELISKHANOV, *Features of digital platforms functioning in information-digital economy,* 497
[29] MÄIHÄNIEMI, *Competition Law and Big Data*, 34
[30] Postanovlenie Pravitel'stva Rossijskoj Federacii, *"O sisteme upravleniâ realizaciej programmy 'Cifrovaâ èkonomika Rossijskoj Federacii'"* [Government of the Russian Federation, *Decree "On the System for Managing the Implementation of the Program 'Digital Economy of the Russian Federation'"*] No. 1030/2017. [Online] Available at: http://government.ru/docs/29003/.
[31] SUNDARARAJAN et al., *Research commentary. Information in Digital, Economic, and Social Networks*, in 24(4) *Information Systems research* 883-905 (2013)
[32] SHAPIRO and VARIAN, *Information Rules: a strategic guide to network economy,* 3
[33] STIGLITZ, *Knowledge as a global public good*, in KAUL, GRUNBERG AND STERN, *Global public goods: International cooperation in the 21st century*
[34] BENKLER, *The Wealth of Networks. How Social Production Transforms Markets and Freedom*, 36

to easily find a boundless amount of information just by accessing the internet, valuable information is scarce for both the individual and the society, and it is a costly and, at the same time, valuable commodity[35]. In this respect, information acts as a bottleneck for competitors who would need it to be able to compete in the market[36]. The presence of legal instruments, like copyright, patent or trade secret, which allow information to act as a commodity is fundamental. Without them, the incentives to invest and innovate in the sector would fall, with the chance of creating a dangerous standstill situation in a market that, without innovation, would not be able to exist and operate properly. Information, acting as a common good, would suffer the overconsumption and undersupply that are characteristics of every other common good because no one would rationally decide to produce a costly good that later can be used for free or at a much cheaper cost by others[37]. The consequence is that these legal instruments permit the creator to price the information above its actual marginal cost, which otherwise would be zero. Thus, the markets that develop based on them are, from a technical-economic perspective, systematically inefficient, as welfare economics defines a market as producing goods efficiently only when it is pricing the good at its marginal cost[38]. The new emerging problem regarding this aspect is how to reconcile the safeguard of whoever invested in innovation, acquiring a solid position in the market, and the protection of all the other competitors and competition in general.

Another crucial aspect of information is that it is both an input and output of its production process[39]. In a way, information can be regarded as cumulative, constituting of an input in producing new information, because new information is built over existing information[40]. Following the previous argumentation about the marginal cost of information being zero and information being a nonrival good, the cumulative aspect connected with property-like exclusive rights creates a new problem. Suppose the creation of any new information good or innovation is based on existing information. In that case, the presence of substantial intellectual property rights or copyrights increases the prices that will be paid by those investing in producing information in the present, with an inefficient result from a future perspective[41]. This happens because those costs are always higher than the marginal cost, given the nonrivalry. The balance that must be achieved is, therefore, delicate. Companies and institutions that invest in producing information need an incentive to pursue that activity. Still, at the same time, the protection of information cannot be too strong to the detriment of all the other parties that will use that information as a basis for innovation.

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[35] ARROW, Information and Organisation of Industry, in CHICHILINSKY, *Markets, Information and Uncertainty: Essays in Economic Theory in Honour of Kenneth J. Arrow*, 20
[36] FATUR, *EU Communication Law and Information Technology Network Industries: Economic versus Legal Concepts in Pursuit of (Consumer) Welfare*, 56
[37] COOTER and ULEN, *Law and Economics, 6th edition*
[38] BENKLER, *The Wealth of Networks,* 36
[39] Ibidem
[40] KÄSEBERG, *Intellectual Property, Antitrust and Cumulative Innovation in the EU and US*, 10
[41] BENKLER, *The Wealth of Networks*, 38

Information and data can also be valued in ways that differ from the proprietary or economic interests over data as an asset, as it happens when claims over data are based on personal human interests in data or dataflows as related to the shaping of one's person and personal image in the eyes of the others[42].
Information is valuable to the parties who control it, directly or indirectly, because, additionally to its potential intrinsic value, information allows those with it to make better decisions. Suppose the viewpoint of an economic agent is taken. In that case, the value of the information represents the agent's willingness to pay for the increased quality of the decision, which is always positive, keeping in mind that information can always be discarded [43].

The digital markets have exacerbated a few problems of information. With the advent of the Internet, companies' ability to acquire, record, organise, structure, store, and use an insane amount of information, including personal data under the definition of Article 4(1) of the GDPR[44], has reached a new level. Indeed, Internet has been the first modern communication medium that has expanded its reach by decentralising the capital structure of production and distribution of information[45]. The volume of data/information created, captured, copied, and consumed worldwide went from 2 zettabytes (trillions of bytes) in 2010 to 64.2 in 2020 and is estimated to grow to 181 by 2025[46].
Right now, the business models of many information intermediaries that operate in the digital markets are rooted in gathering large amounts of data, which has often become a fundamental goal of the business strategy[47]. This phenomenon, usually known as Big Data[48], referring to how firms use technology to aggregate data and extract value from it to create or enhance products or services, has created concerns connecting the antitrust perspective with both the consumer protection perspective and the data protection perspective[49].

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[42] BINNS and BIETTI, *Dissolving Privacy, One Merger at a Time: Competition, Data and Third Party Tracking*, in 36 *Computer Law & Security Review* 13 (2020) [Online] Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3269473 [Accessed 15 March 2022]
[43] CRÈMER, DE MONTOYE, and SHWEITZER *Competition Policy for the Digital Era,* 27
For an economical and mathematical analysis of how the value of information can be calculated see BERGMANN, BONATTI and SMOLIN, *The Design and Price of Information*, in 108(1) *American Economic Review* (2018)
[44] European Parliament and Councilm *Regulation (Eu) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).*
[45] BENKLER, *The Wealth of Networks,* 30
[46] Statista Research Department *Volume of data/information created, captured, copied, and consumed worldwide from 2010 to 2025*, 2021 [Online] Available at: https://www.statista.com/statistics/871513/worldwide-data-created/ [Accessed: 15 March 2022]
[47] DAVILLA, *Is Big Data a different kind of animal? The treatment of Big Data under the EU competition rules*, in 8(6) *Journal of European Competition Law and Practice* 370-381 (2017)
[48] 'Big data is a term for massive data sets having large, more varied and complex structure with the difficulties of storing, analyzing and visualizing for further processes or results' in SAGIROGLU and DUYGU, *Big Data: a review*, in *International Conference on Collaboration Technologies and Systems (CTS)*, 2013
[49] ZHE JIN and WAGMAN, *Big data at the crossroads of antitrust and consumer protection*, in 54 *Information Economics and Policy* 442-492 (2021) and
ROBERTSON, *Excessive data collection: privacy considerations and abuse of dominance in the era of Big Data*, in 57 *Common Market Law Review* 161-189 (2020)

When it is perceived as a competitive advantage, as happened in the course of merger proceedings, data and information concentration may in themselves raise competition concerns, as it has been shown in the Apple/Shazam merger procedure[50], in which the Commission was asked to investigate further the potential foreclosure of competing providers of digital music streaming app as a result of Apple gaining access to commercially sensitive information on its rivals through the concentration with Shazam[51]. The first case in which the Commission considered the relationship between privacy and antitrust policy was the Microsoft/LinkedIn merger procedure, in which it was stated that the foreclosure effects resulting from the concentration would strike a competitor which offers, regarding privacy, more robust protection to users compared to LinkedIn, leading it to marginalisation, and would also restrict consumer choice concerning this significant parameter of competition[52].

Information, and in particular personal data, often constitutes the price that people pay to use a service that seems to be free and a connection between the making process of that price and the market dynamics, which are reflected by that price, should exist and needs to be investigated[53].

The fact that many online services are offered seemingly for free, actually being paid by the customers with their presence in the network and with their data, which are challenging to estimate financially but allow the companies to obtain revenues from other sides of a market, require more than one adjustment in the analysis of those markets and their configuration. Consequently, in the last few years, many European national competition authorities have initiated several sector studies and inquiries trying to understand better the interaction of digital platforms and data[54]. In particular, the Italian competition authority (AGCM), together with the communications authority (AGCOM) and the data protection authority (GPDP), has recognised the fact that since many services are offered by the digital platforms at zero-price and without any quantity constraint, as price and quantity parameters were the ones traditionally used in the competition analysis, other criteria such as innovation, quality and fairness should be considered in order to achieve a better consumer protection[55]. In this respect, the level of personal data protection should represent a significant element of the overall quality of the service, but generally users are penalised by the lack of transparency platforms offer about how data are collected and analysed, and this poses a severe obstacle to the proper functioning of

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[50] European Commission, Decision of 6 September 2018, *Case M.8788 – Apple/Shazam.*
[51] BINNS and BIETTI, *Dissolving Privacy, One Merger at a Time*
[52] European Commission, Decision of 6 December 2016, *Case M.8124 – Microsoft/LinkedIn*, par. 350
[53] G. OLIVIERI, *The "dangerous relationship" between antitrust and privacy in digital markets,* in Speciale *Orizzonti del Diritto Commerciale*, 2021, 359 *ivi* 361
[54] See as an example Autoritè de la Concurrence and Bundeskartellamt *Competition Law and Data*, 2016 [Online] Available at: https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf;jsessionid=D280879C8B35A0E13E0A8F77BFB35939.2_cid371?__blob=publicationFile&v=2 [Accessed 4 June 2022]
[55] Autorità Garante della Concorrenza e del Mercato (AGCM), Autorità per le Garanzie nelle Comunicazioni (AGCOM) and Garante per la Protezione dei Dati Personali (GPDP) *Indagine conoscitiva sui Big Data*, 2019, 118 [Online] Available at: https://www.agcm.it/dotcmsCustom/getDominoAttach?urlStr=192.168.14.10:8080/C12564CE0049D161/0/0E1F1A7563AE8D7DC125851F004F99C1/$File/p28051_all.pdf [Accessed 4 June 2022]

competition mechanisms, as it is the consumers who, having all the necessary information, should reward with their choices the undertakings offering the best product or service[56]. Information asymmetries, however, impact not only consumers but also commercial users, due to the disproportion in financial resources and technical competencies between them and the big digital platforms, which, accordingly to the Authority, should be subjected to measures to ensure transparency, fairness and equality[57].

Furthermore, companies are aware of the importance of having access to data. Therefore, firms are currently experimenting arrangements for data sharing and pooling, which can produce efficient and socially desirable results, but that can also be anticompetitive in other situations[58]. Usually, a B2B open data approach, whereby a data supplier makes available its data to an in-principle open range of users, will be pro-competitive, enhancing data access and representing a helpful instrument in resolving data bottlenecks[59].

At the same time, dominant, data-rich firms may refuse to grant other firms access to data[60]. The possibility of considering this conduct abusive, as it can lead to anticompetitive foreclosure, will be analysed later in this chapter.

As the interest of the national authorities demonstrates, information plays a fundamental role in the shaping and functioning of digital markets and, at the same time, creates issues that the competition policy must address, which at the same time would require more precise *ad hoc* regulation.

1.3 Main factors of the digital economy

Having understood which activities we consider as part of the digital economy and how information constitutes a particular good that is offered and used by the actors which operate in this landscape, it is now necessary to switch the focus to the key elements that shape the digital markets, leading to their peculiar configuration, with the presence of few big players and many SMEs and with the presence of several multi-sided markets. The main three characteristics of digital markets are extreme returns to scale, the presence of network externalities, and data's role[61].

The existence of economies of scale refers to the situation where the average costs of providing products or services decrease as the scale of production increases[62]. Using the economic approach, it can easily be found

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[56] BARBANO, *Verso un Antitrust Italiano 4.0? I GAFAM e i Big Data all'esame dell'AGCM*, in 4 *Diritto del Commercio Internazionale,* 2021, 957
[57] AGCM, AGCOM, GPDP, *Indagine Conoscitiva*, 40
[58] VIVES, *Oligopoly Pricing: Old Ideas and New Tools,* 225
[59] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era, 9*
[60] Ibidem
[61] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 2
[62] JONES and SUFRIN, *EU Competition Law: Text, Cases, and Materials,* 7

that if the average production costs of a firm fall with increasing output, that firm's management will find it profitable to expand its scale of operation, embarking upon a dynamic path of growth[63].

Having extreme returns to scale entails that the marginal cost of production of digital services sustained by a company to serve an additional customer is minimal, so the overall cost of production is not proportional to the number of customers served[64].

Economies of scale are massively spread in the digital sector thanks to the nature of the services and products provided. To enter the market, it is necessary to create a platform which requires considerable investments in server infrastructure and research and development[65]. Once the initial investments are made, the incremental costs of producing additional units or facilitating interaction among users and advertisers decrease, even though further investments might be helpful in improving quality[66].

Thanks to the meagre cost of reproduction, information, once created, can be transmitted to a substantial number of people without a significant increase in the total cost. For example, Meta Platforms Inc. (formerly Facebook Inc.) in 2021 had 71.970 employees[67] against a cumulative number of monthly product users, as of the 4th quarter of 2021, of 3.59 billion[68], with a rate of almost 50.000 monthly users per employee.

Economies of scale also explain the rise of free services, as consumers seem to be attracted by a zero price, as is shown by an upward discontinuity in demand when the price reaches zero. Firms can decide whether to charge for their service or take advantage of returns to scale and attraction of free and decide to derive their income from advertising[69].

Following, the role of data needs to be considered. The previous paragraph has already explained how information qualifies as a particular category of good due to its characteristics, but this is now time to explain further the role that data plays in the services offered in digital markets.

Data is usually divided, based on how individual-level data are obtained, in *volunteered*, when the data is intentionally generated and contributed by the user of a product, *observed*, when the data is obtained automatically from a user's or a machine's activity, and *inferred*, when the data is the result of a non-trivial

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[63] THORE, *Economies of Scale in the Digital Industry*, 2001, in COENICAO et al., *Knowledge for Inclusive Development,* 2002
[64] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era*
[65] SHAIEK, *Excessive Data Collection as an Abuse of Dominant Position. The Implications of the Digital Data Era on EU Competition Law and Policy*, 21
[66] GRAEF, *EU Competition Law, Data Protection and Online platforms: Data as Essential Facility*, 2016
[67] Statista Research Department, *Meta: number of employees 2004-202,* 2022 [Online] Available at: https://www.statista.com/statistics/273563/number-of-facebook-employees/#:~:text=The%20social%20network%20had%2058%2C604,Sandberg%20and%20CFO%20David%20Wehner. [Accessed 21st February 2022]
[68]Statista Research Department, *Meta: monthly active product family users 202, 20221* [Online] Available at: https://www.statista.com/statistics/947869/facebook-product-mau/ [Accessed 21st February 2022]
[69] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 20

transformation and analysis of volunteered and observed data[70]. A second possible classification is given by the use of data. It is articulated *in non-anonymous use of individual-level data*, which includes the use of data to provide a service to the individual, *anonymous use of individual-level data*, which comprises all cases in which individual data is used anonymously because the goal is not to provide a service to the individual who generated the data, *aggregated data*, which refers to more standardised data that has been irreversibly aggregated, and finally *contextual data*, which is data that does not derive from individual-level data[71].
Individual-level data and anonymous access to a large amount of individual-level data have become fundamental determining factors for innovation and competition in an increasing number of sectors. In particular, anonymous access to individual-level data can be used to reach a better understanding of the systems, generate aggregated data and train machine-learning algorithms, resulting in trained models that can provide a better service for the individual who generated some data in the first place or can be used for entirely unrelated purposes. Access to data, in particular exclusive access to a large amount of individual-level data, might provide a competitive advantage because a superior algorithm might attract users who would contribute more or more recent data on an ongoing basis, reinforcing their advantage[72].

The last aspect necessary to analyse is network effects, or network externalities[73], which represent the gains enjoyed by consumers of a product when more consumers use that product[74]. These effects are usually divided into direct and indirect, based on the source of the benefit to participants in the network. For direct network effects, the network is more valuable for its users the more interconnections there are between nodes. The typical example is offered by communication services, for which the more people own the machine, or in the present days, the application, that is used to participate in the network, the more valuable the network gets[75]. In this kind of network, a positive feedback effect exists. An increased network size makes the larger network more attractive to new purchasers, and the instrument used to access the network is more valuable[76]. Network effects sometimes arise due to demand-driven dynamic economies of scale, as it happened for systems based on learning by doing mechanism[77]. For example, a search engine's quality of search results is intimately

[70] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 24
See also World Economic Forum, *The Emergence of a New Asset Class,* 2011, 7 [Online] Available at: https://www3.weforum.org/docs/WEF_ITTC_PersonalDataNewAsset_Report_2011.pdf [Accessed 3 March 2022]
[71] Ibidem
[72] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 31
[73] For a more precise distinction between the two terms see LIEBOWITZ and MARGOLIS, *Network Externality: An Uncommon Tragedy*, in 8 *Journal of Economic Perspectives* 133-150 (1994)
[74] OECD, *Practical approaches to assessing digital platform markets for competition law enforcement: Background note by the Secretariat for the Latin American and Caribbean Competition Forum*, 2019, 6 [Online] Available at: https://one.oecd.org/document/DAF/COMP/LACF(2019)4/en/pdf. [Accessed 1 March 2022]
[75] PAGE and LOPATKA *Network Externalities*, in BOUCKAERT and DE GEEST, *Encyclopedia of Law and Economics*
[76] ARTHUR, *Positive Feedbacks in the Economy*, in 262(2) *Scientific American* 92-99 (1990)
[77] CALVANO and POLO, *Market power, competition and innovation in digital markets: a survey*, in 54 *Information Economics and Policy* 2 (2021)

connected to the scale of operations. Thus, a massively used search engine will provide better results than less used rivals. Indirect externalities emerge when the network becomes more valuable as more interoperable or compatible components are offered for the product, as they represent the network of users of systems of compatible devices, even if the devices owned by different users are not physically connected. For example, the adoption of hardware by one purchaser confers a benefit to other hardware users by expanding the hardware's installed base and therefore stimulating the demand for compatible products[78]. In other words, the number of users that adopt a technology influences its convenience; the more, the merrier.

In digital markets, the presence of network effects means that if a new entrant wants to operate in the market and acquire market share, it is not enough to offer better quality and a lower price than the incumbent does, as happens with traditional competition, but it also needs to convince the users of that incumbent to coordinate their migration to its own service[79]. In markets characterised by network externalities, the adoption of a single seller's product as a de facto standard may be favoured, with the consequence of intense competition early in the market's existence to become that de facto standard and earn monopolist profits[80].

Once a standard is formed, the market may remain on it and its successors for a long time, exhibiting 'excess inertia' and remaining locked into that standard, even though an objectively better one is available[81]. In this context, the product that succeeds in achieving a stable network first, or earlier than others, obtains an advantage over other products, which will find much more challenging to acquire a new network unless a great amount of investment is made, creating a service or product that is much more appealing, useful and convenient for the user, or interoperability and compatibility with the dominant product are ensured[82].

This phenomenon occurs because present users face substantial switching costs, which can also be represented by the cost of giving up a well-established network for a new one that is not equally big. Even though all users would benefit from choosing the new standard, the advantages do not accrue to the present users who must pay for switching. For this reason, the new purchasers may also prefer the established standard to the new one, basing their choice on the immediate benefit that the established network offers[83]. The cost sustained by the customers for switching to a new standard includes wasting their existing products, learning how to use the latest product, changing other complementary products or, for example, as it happens in social networks, creating a new community[84]. Therefore, for operators and innovators that want to enter the market, collective switching costs stemming from network externalities work in a nonlinear way, as convincing ten people

[78] PAGE and LOPATKA, *Network Externalities*
[79] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 22
[80] KATZ and SHAPIRO, *Systems Competition and Network Effects*, in 8 *Journal of Economic Perspectives* 93-115 (1994)
[81] KATZ and SHAPIRO, *Network Externalities, Competition, and Compatibility*, in 75(3) *American Economic Review* 424-440 (1985)
[82] CHO, *Innovation and Competition in the digital network economy. A legal and Economic Assessment on Multi-tying practice and Network Effects*
[83] FARRELL and SALONER, *Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation*, in 76(5) *American Economic Review* 940-955, 943 (1986)
[84] CHO, *Innovation and Competition in the digital network economy*

connected in a network to switch to a different incompatible network is more than ten times as hard as getting one customer to change, but if not all or at least most of them decide to switch, the new network will not work because no one will want to be the first to give up the network externalities and risk being stranded. For this reason, having control over a sizeable installed base of users can be considered the most significant asset for an economic operator that operates in a market with network externalities[85].

A corollary of network effects is the tipping effect, consisting of a growth of demand of users for the preferred product directly related to the network width, giving the dominant company that has taken advantage of it the possibility to rely on tying practices to leverage its dominance into new adjacent markets as well as reinforce it under the intensified network effects[86]. The second corollary of network effects is the lock-in effect. If the relevant market is saturated by network and a tipping effect, entry barriers that exclude other existing and new competitors from entering the market may be created. Under lock-in effect, a new consumer will not find the competing product non-interoperable or non-compatible with a dominant product to be convenient, as a small network and difficulties in learning how to deal with that new competing product will come with it. As for existing consumers who have used the dominant product, the incentives to switch to the new product are even less due to the costs discussed before[87].

Despite existing in the traditional economy, network effects have been enhanced by the digital economy thanks to the reduction of transaction costs. Digital technologies make it easier to authenticate the other parties in the transaction, gain knowledge of their reputation, communicate and retrace the exchanges, leading to the appearance of immense intermediation platforms that can also make use of machine learning to improve their performances further [88]. Additionally, the self-referential nature of digital technology diffusion of digital service results in positive network externalities so that digital technology generates, in turn, even more digital technology[89]. These characteristics are usually said to lead to a winner takes all condition, in which the first companies that succeed in beginning exponential growth before the others gain market dominance thanks to a snowball effect[90]. In these markets, the strong consolidating forces lead to high levels of market concentration, frequently resulting in a market with just one relevant player left. Contrary to this, however, it has been sustained that the large digital platforms that deal directly with consumers are not winner takes all firms, as they must compete on the merits or otherwise rely on exclusionary practices to attain or maintain their dominant position, as it happens in the markets that do not constitute natural monopolies[91]. Economies of scale

[85] SHAPIRO and VARIAN, *Information Rules: A Strategic Guide to the Network Economy*
[86] CHO, *Innovation and Competition in the digital network economy*
[87] Ibidem
[88] COLIN and others, *The Digital Economy*, in 26(7) *Notes du Conseil d'Analyse Èconomique* 1-12 (2015)
[89] YOO, HENFRIDSSON and LYYTINEN, *The new organizing logic of digital innovation: An agenda for information systems research*, in 21(4) *Information systems research* 724-735 (2010)
[90] COLIN and others, *The Digital Economy*
[91] H. HOVENKAMP, *Antitrust and Platform Monopoly*, in 130(8) *Yale Law Journal* 1952-2050, 1971 (2021)

and network effects develop in traditional network services because of the infrastructure, which imposes high fixed costs; however, in the digital economy, these benefits are tied to the trust instilled in users rather than tangible infrastructures, and for this reason, companies focus more in offering high-quality experiences for customers, to persuade them not to consider offers from other digital companies on the same market[92]. Consumers are continuously intrigued by new entrants into the market, communicate with one another, coordinate their activities, and therefore form a large mass capable of quickly bringing all available offers into competition, forcing digital businesses to hide behind physical infrastructures and regulatory barriers, as they have in the past[93]. The circumstance that networks usually are local and not global also pushes in this direction, as this characteristic allows more competitors to be active in the marketplace simultaneously and try to engage more users[94].

Furthermore, if digital platforms were natural monopolies, they would be able to maintain their position just by charging a price that is not excessively above costs. However, digital platforms engage in a policy of systematic acquisition of recent entrants trying to blunt competitive pressure, showing that these platforms may resort, and are resorting, to exclusionary or exploitative practices to keep their dominance in a given market in which they previously acquired the status of winner-takes-all[95].

Additionally, even if platforms were to be defined as natural monopolies, the natural monopoly status is not necessarily permanent, as its duration depends on technology and market size, and both can change abruptly over time[96]. The reality shows that company monopolies are shorter lasting in the digital economy than in traditional business networks. Several times in the brief history of the digital economy, temporarily dominating corporations have been pushed out of their positions by disruptive innovation or the arrival of more innovative competitors[97]. For example, the web browser market has been dominated by Netscape, Internet Explorer[98] and Google Chrome[99]. The fragility of the positions achieved can be explained by the severe competition that exists. Since market entrance costs are low, as the majority of digital markets require little physical capital to participate, new entrants are constantly pressuring the market and competitors of a dominating company can reclaim the initiative at any time and threaten its monopoly by rapidly spreading new processes or functions on a broad scale[100]. Additionally, large digital companies compete with each other, constantly diversifying

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[92] COLIN and others, *The Digital Economy*
[93] Ibidem
[94] BANERJI and DUTTA, *Local network externalities and market segmentation*, in 27(5) *International Journal of Industrial Organization* 605-614 (2009)
[95] H. HOVENKAMP, *Antitrust and Platform Monopoly,* 1972
[96] Ibidem
[97] COLIN and others, *The Digital Economy*
[98] StatCounter Global Stats, *Browser Market Share Worldwide in 2009*, 2010 [Online] Available at: https://gs.statcounter.com/browser-market-share/all/worldwide/2009 [Accessed 10 March 2022]
[99] StatCounter Global Stats, *Browser Market Share Worldwide Mar 2021 - Mar 2022*, 2022 [Online] Available at: https://gs.statcounter.com/browser-market-share [Accessed 1 April 2022]
[100] BRYNJOLFSSON and MCAFEE, *Investing in IT that Makes a Competitive Difference*, in 86(7) *Harvard Business Review* (2008)

into new markets to benefit from synergies and make their dominant positions more difficult to challenge, making the analysis in this regard particularly difficult, as the configuration of the services offered by the information society services companies usually represent an intersection between multiple markets, businesses and customers.

1.4 continues: two-sided markets and zero-price markets

Two-sided or more generally multi-sided markets can be roughly defined as markets in which one or several platforms enable and facilitates interactions between end-users while trying to keep the two or multiple sides on board by appropriately charging each side[101]. Their existence and functioning are considered to be direct results and effects of network externalities as, in general, user satisfaction on one side of the market increases with the number of users on the other side[102].

Digital markets are often two-sided, designed as special platforms connecting two distinct groups who provide each other with some benefit[103]. In this context, the relationship between platforms and businesses creates new opportunities but also new problems. Whereas, thanks to online platforms, enterprises, particularly SMEs, can target a broad audience, exceeding the territory of individual Member States that would otherwise be unreachable, with platforms constituting the main entry points to access specific markets, the relationship between the platform itself and the users on the two sides of the market may let competition concerns arise[104]. While in theory, platforms, usually basing their business model on the presence of multiple businesses to create value for consumers, are subjects to a co-dependence with the actors that choose to use that particular platform and not a different one, at the same time, they typically maintain a superior bargaining position[105]. The chances of having competition issues are exceptionally high in this context because, thanks to the characteristics that have been analysed in the previous paragraph, a platform that succeeds in forming a solid network from which it can obtain and elaborate a tremendous amount of data, and that benefits from returns to scale, can reach a position so strong that allows it to adopt anticompetitive conducts that can be difficult to counter both for the actors that are using the platform and for other possible competitors[106]. Furthermore,

[101] ROCHET and TIROLE, *Two-Sided Markets: a progress report*, in 37(3) *RAND Journal of Economics* 645-667 (2006)
[102] COLIN and others, *The Digital Economy*
[103] WEBER, *Disruptive Technologies and Competition Law*, in MATHIS and TOR, *New Developments in Competition Law and Economics*
[104] GRAEF, *Differentiated Treatment in Platform-to- Business Relations: EU Competition Law and Economic Dependence*, in 38(1) *Yearbook of European Law* 448-499 (2019)
[105] Ibidem
[106] European Commission, *Online Platforms and the Digital Single Market Opportunities and Challenges for Europe,* 2016 Luxembourg: OM/2016/0288

substantial fixed costs on one side of a two-sided market may translate into switching costs suffice to stall the adoption of a new network or platform, making even more complicated for a new competitor to emerge[107].
In two-sided markets, a firm sells two distinct products or services to two different groups of consumers and knows that selling more to one group affects the demand from the other group, and possibly vice versa[108].
Within this framework, the volume of transactions between end-users depends on the structure and not only on the overall level of the fees charged by the platform. A platform's usage or variable charges impact the two sides' willingness to trade once on the platform and, thereby, their net surpluses from potential interactions, as the membership or fixed charges condition the end-users presence[109]. Two distinct groups of participants can form the two sides of the market, for example, media viewers and advertisers, but there are cases in which one participant can act on both sides of the market, as happens in consumer-to-consumer marketplaces such as eBay[110]. The element that needs to be highlighted is, in this case, the possibility of the platform bringing new pricing options in these mixed two-sided markets, allowing it to recur to bundling and offer dual-side consumers a discount instead of just setting a separate price for each side[111]. Data-dependent firms often operate in two-sided or multi-sided markets, providing different services to distinct user groups and cross-subsidizing these services, for example as it happens when the two sides consist of users of "free" services on one hand and other businesses, especially advertisers, on the other[112].
The example of this business model can be perfectly observed in social networking and media platforms, as they give users free access to certain services on one side of the platform, relying on the provision of advertising services to businesses on the other side of the platform to generate a revenue[113].
After further consideration, users of these services are paying for the service by making themselves available to see the advertising on the platform and by making personal data about themselves known to the platforms, whose algorithms enable advertising to be highly personalised according to each user's tastes[114].
In fact, to offer a better service for the paying users, based on the more efficient behavioural targeting, these platforms use payment-free services to acquire users' data, which receive as a result, a high commercial value[115].

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[107] ACKERBERG and GOWRISANKARAN, *Quantifying Equilibrium Network Externalities in the ACH Banking Industry*, in 37 *RAND Journal of Economics* 738-761 (2006)
[108] FILISTRUCCHI, GERADIN and VAN DAMME, *Identifying two-sided markets*, in 1 *University of Florence Working Papers* (2012)
[109] ROCHET and TIROLE, *Two-Sided Markets: a progress report*
[110] GAO, Platform pricing in mixed two-sided markets, in 59(3) *International Economic Review* 1103-1129 (2018)
[111] Ibidem
[112] BURRI, *Understanding the Implications of Big Data and Big Data Analytics for Competition Law*, in MATHIS and TOR *New Developments in Competition Law and Economics*
[113] Ibidem
[114] WHISH and BAILEY, *Competition Law (10th edition)*, Oxford, Oxford University Press, 2021, 35
[115] BURRI, *Understanding the Implications of Big Data*

Two-sided markets generate complexity in terms of market definition, as it is required to understand if there are different markets on each side of the platform or whether the platform itself is part of a broader market[116]. The EU Commission considered this problem in the Mastercard investigation[117]. Mastercard tried to argue that the product market consisted of the Mastercard payment card system as a whole together with other payment card systems and all other forms of payment, but the Commission rejected this definition[118].

After preliminarily stating that two-sided demand does not imply the existence of one single joint product sold to a joint demand, the Commission considered that the two groups of consumers in the payments cards industries are cardholders and merchants, as well as subsequent purchasers and highlighted the existence of three levels of interaction within open payment card systems. End users do not directly connect to the platform but do so only through the intermediaries, issuers and acquirers, who are themselves providing services distinct from those offered by the platform[119]. As for the joint supply, the platform provided by Mastercard did not represent a product jointly offered to cardholders and merchants, but it was a vehicle for issuers and acquirers to provide distinct services to two different groups of customers. The scheme owner, in this case, acted as a platform for interlinked banks, issuers and acquirers to perform a payment transaction. Therefore, adequate consideration of the different levels of interaction between those other parties is required. Besides, the services considered did not consist of just a transfer of money, but they were on each side a bundle of complex services of a technical and commercial nature that together allow for the transfer of money[120].

Regarding the joint demand, even if the demand at the up-stream network level is dependent on demand at the down-stream issuing and acquiring level of the system, this interdependence in a vertically structured model does not consequently have a definition of one single market, but it is still possible to define distinct product market at each level of the production chain[121]. This principle is embedded in the Commission's constant practice of distinguishing different levels in a production chain to analyse competitive constraints on retailers[122]. The Commission argued that, regarding the complementarity of demand for card usage and card acceptance at the downstream level, the presence of cooperation between the banks, finalised at increasing the total card transaction volume under a common card brand, did not imply the disappearance of the competitive processes in the down-stream level, or that these processes could no longer be analysed in distinct product markets[123]. The identification of two separate markets was also supported by the fact that as the acquirers provided a wide range of services to merchants, the services of issuing banks to cardholders as well were not

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[116] WHISH and BAILEY, *Competition Law*
[117] EU Commission, Decision of 19 December, *Case 2007/COMP/34.579*, *MasterCard*
[118] WHISH and BAILEY, *Competition Law*
[119] EU Commission *Mastercard decision*, para. 257–261
[120] Ibidem, par. 261
[121] Ibidem, par. 263
[122] See as an example European Commission, Decision of 23 September 1964, *Case OJ 2545/64 Consten/Grundig*
[123] EU Commission, *Mastercard decision*, par. 263

limited to a mere transfer of money between the issuing to the acquiring bank, making it difficult to qualify those service provided as strictly complementary. The consequence was that the two distinct markets needed to be considered and examined separately and that joint demand should not be resorted to as the basis of the analysis carried out to define the product market. The Commission concluded that it was possible to distinguish two types of competition, one which took place upstream at the level of networks and another downstream in the value chain. Therefore, it was possible to identify the network market, where card scheme owners competed to persuade financial institutions to join their schemes and on which they provided services to such institutions, as well as issuing and acquiring markets, both of which required a supply and demand side analysis to confirm the presence of a distinct relevant product market.

Even if it is possible to identify and consider, from a competition perspective, two or even more different markets, the MasterCard case provides us with additional information, as many studies have examined the economics of two-sided markets due to the increasing antitrust activity in the payment card area[124]. The main finding of these researches is that welfare-maximising and profit-maximising prices on each side of the market are related to cost and demand on both sides of the market, thus preventing recourse to the conventional rule indicating pricing close to marginal cost as efficient[125]. The connection between markets on different levels of the value chain entails that efficient pricing may require a price above or below marginal cost on a particular side of the markets, requesting a joint price assessment for a proper analysis.

To fully understand how pricing works in these markets, it may be helpful to consider a given market in which it is assumed that a single platform makes all network transactions, to consider what the monopoly, profit-maximising, pricing in a two-sided market would be. Even if the network faces a single demand, that demand will depend on the prices being separately charged on the two sides of the market, resulting in the monopolist facing competition from substitute products and services on two different margins and requiring the monopolist to account for the marginal revenues from both margins when choosing prices to adopt a profit-maximising behaviour[126]. The responsiveness of demand on one side does not arise entirely from that side's behaviour, but the interconnection of these markets allows one side to affect the other. The consequence is that all that matters is the overall effect of each price on the total demand for transactions, which allows the network monopolist to predict if a transaction will disappear following a price increase.

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[124] See as an example RYSMAN, *The Economics of Two-Sided Markets*, in 23(3) *The Journal of Economic Perspectives* 125-143 (2009) and GUTHRIE and WRIGHT, *Competing Payment Schemes*, in 55(1) *Journal of Industrial Economics* 37-67 (2007)

[125] EMCH and THOMPSON, *Market Definition and Market Power in Payment Card Networks*, in 5(1) *Review of Network Economics* 45-60, 47 (2006)

[126] EMCH and THOMPSON, *Market Definition and Market Power*

The result is that the hypothetical monopolist chooses an interchange rate that equalises the slope of demand concerning prices on both sides of the market to maximise the number of transactions, given any values for the switch fees[127].

To be more mathematically precise, if t_b is the cost paid by the buyer per transaction and t_s is the cost paid by the seller per transaction, the maximal number of transactions that buyers on one side of the market will be willing to carry out is represented by a function $D_b(t_b)$ that decreases with the cost t_b and a similar function $D_s(t_s)$ can be defined for the sellers on the other side[128]. Considering that a transaction occurs when a match between a buyer and a seller willing to carry out the transaction is found, the total number of transactions will increase with both D_b and D_s[129]. The entire transaction volume is then proportional to the product of the demands $D_b(t_b)$ $D_s(t_s)$[130]. To maximise the profit, the platform has to balance the charges imposed on the two sides. Increasing the fee on one side has an opportunity cost that also accounts for the revenue generated on the other side[131].

For this reason, it would not be correct to consider the two sides of the market independently to find out which the accurate prices would be, as it generally results in the combination of prices that maximises the number of transactions and that generates, for the platform that is set at the intersection of the two sides, the maximum revenue possible. The formula also explains why in certain circumstances, the platform, which often effectively acts as a monopolist, decides not to charge one side of the market to maximise the total revenue, using the free offering of services as an instrument to create a strong network, which will allow it to obtain or maintain market power on the other, paid, side, generating more transactions and at a higher price[132]

Additionally, as stated before, zero prices can be substituted by users' information, attention or presence on the platform. Often consumers are consciously providing something in return for the free service, be it personal information or information on their preferences, all elements that will help the platform offer a more appealing service to the other side of the market[133].

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[127] EMCH and THOMPSON, *Market Definition and Market Power*
[128] JULLIEN, *Two-Sided B to B Platforms*, 2011, in PEITZ and WALDFOGEL, *The Oxford Handbook of the Digital Economy*, 161
[129] Ibidem
[130] ROCHET and TIROLE, *Platform Competition in Two-Sided Markets*, in 1 *Journal of the European Economic Association* 990-1029, 999 (2003)
[131] JULLIEN, *Two-Sided B to B Platforms*
[132] EVANS, *The Antitrust Economics of Multi-Sided Platform Markets*, in 20(2) *YJR* 43 (2003)
[133] PARKER and VAN ALSTYNE, *Two-Sided Network Effects: A Theory of Information Product Design*, in 51(10) *Management Science* 1494-1504 (2005)

2. Article 102 TFEU: how can it be applied to the digital markets?

It has been considered what digital markets are constituted of, how the new role of information influences them, their characteristics and how they are often shaped as two-sided markets. It has also been suggested that all these elements create an environment in which the emergence of a platform that monopolises one given market is favoured.
It is time to examine the discipline of the abuse of dominant position, namely Article 102 of the TFEU, and how those market peculiarities create new problems in the traditional competition analysis process that need to be addressed.

2.1 What is an Abuse?

Article 102 of the TFEU generally prohibits "*any abuse by one or more undertakings of a dominant position*". Therefore, what is prohibited is not the dominant position itself, which is perfectly legitimate, but the abuse of that dominant position by the undertaking. In Michelin v Commission the European Court of Justice held that irrespective of the reasons for which the undertaking has a dominant position, the undertaking concerned has a special responsibility not to allow its conduct to impair genuine undistorted competition on the common market[134]. This means that unilateral acts that are legitimate if held by a non-dominant position can amount to an infringement if held by a dominant undertaking. In practice, the application of Article 102 involves a competition authority or a court having to decide whether a dominant firm's behaviour deviates from a counterfactual world in which competition is 'normal' or 'fair' or 'undistorted' or qualifies as 'competition on the merits, keeping in mind that none of these expressions has a clear and precise meaning[135]. The main problem is represented by the fact that Article 102 of the TFEU does not offer a clear definition of what abuse is but only provides a non-exhaustive list of conducts, leaving a good margin for the Commission and for the Court of Justice in judging the abusiveness of an undertaking's behaviour and, above all, in deciding what abuse is and what is not. The flexibility of the concept allows the inclusion of new conducts that were not possible in the traditional markets but that are easily enacted in the digital ones and that therefore do not have any judicial precedent. Some of the strategies implemented in the digital markets do not fit neatly within the legacy frameworks and tests crafted over the years, and therefore doubt arises about the possibility of

[134] Court of Justice of the EU, Judgement of 9 November 1983*, Case C-322/81, 'NV Nederlandsche Banden Industries Michelin v Commission of the European Communities'*, ECLI:EU:C:1983:313, par. 57
[135] WHISH and BAILEY, *Competition Law,* 195

comparing these practices to pre-existing categories and the definition of an appropriate legal framework[136]. Although this aspect represents an asset in the competition policy, potentially avoiding any form of protection failure, it is nevertheless essential, to have sufficient legal certainty, to have a clear representation of which elements should be evaluated in the assessment of abusiveness of the conduct under scrutiny.

In general, the behaviour of an enterprise occupying a dominant position may be an abuse for three reasons, which are: if it takes advantage of its economic power to obtain benefits not obtainable in normal and reasonable effective competition, at the expense of the interests of customers or consumers or of suppliers, which are conducts usually referred to as exploitative abuses; if it significantly restricts intra-brand or inter-brand competition, or alters the market in such a way that competition is likely to be substantially reduced, or increases or reinforces the firm's economic power, which are conducts usually called anticompetitive abuses and need to be distinguished from the regular legitimate competition, realised by means of providing a better product or service or doing so at a lower price or on better terms, without falling into conscious losses;

if it damages or seriously interferes with the business of another enterprise, which is conduct refer to as reprisal or exclusionary abuses, aimed at driving competitors out of the market[137]. It is nevertheless necessary to remember that traditionally it is competition and not competitors as such that is to be protected by European competition law, and therefore it is still possible to attempt to become stronger by outperforming the competitors, even if some of them may be forced out of the market or be discouraged from entering as a consequence[138].

To find more precise boundaries, it can be helpful to look at the recent case Servizio Elettrico Nazionale SpA v Autorità Garante della Concorrenza e del Mercato, in which the Court of Justice answered many questions from the Italian Consiglio di Stato, which had made a reference *ex* Article 267 TFEU, about what abuse of dominance is and about the burden of proof in the demonstration of the existence of such an abuse[139].

The first question examined by the Court concerned whether there is the necessity for the competition authority to demonstrate the abusiveness of practice, to establish not only that the practice itself can undermine a structure of effective competition in the relevant market but also or alternatively, that it is likely to affect consumer welfare[140].

The CJEU argued that Article 102 TFUE is part of a broader set of rules which has the objective of preventing competition from being distorted to the detriment of the public interest, individual undertakings and

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[136] COLOMO, *What is an Abuse of Dominant Position? Deconstructing the Prohibition and Categorizing Practices*, forthcoming in AKMAN OR B. STYLIANOU AND K. STYLIANOU, *Research Handbook on Abuse of Dominance and Monopolization*

[137] LANG, *Some aspects of abuse of dominant positions in European community antitrust law*, in 3(1) *Fordham International Law Forum* 1-50, 16 (1979)

[138] European Commission, *DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses*, 2005, and COLINO, *Competition Law of the EU and UK (8th edn)*

[139] Court of Justice of the EU, Judgement of 12 May 2022, *Case C-377/20, 'Servizio Elettrico Nazionale SpA v Autorità Garante della Concorrenza e del Mercato'*, ECLI:EU:C:2022:379

[140] Ibidem, par. 40

consumers, with the general aim of ensuring welfare within the European Union and make the functioning of the internal market possible. The specific goal of Article 102 TFEU is to prevent the conduct of an undertaking in a dominant position from having the effect, to the prejudice of consumers, of hindering, by means or resources other than those on which normal competition depends, the maintenance of the degree of competition existing in the market or the growth of that competition. In this context, practices that are likely to cause direct harm to consumers and those that harm them indirectly by impairing the structure of effective competition are penalised. This means that what shall be regarded as the final aim which justifies the intervention of competition law to suppress the abuse of a dominant position in the internal market or a substantial part thereof is the welfare of consumers, both intermediate and ultimate. Despite this, there is no equivalent in Article 102 to Article 101(3) whereby an agreement that restricts competition can nevertheless be permitted because it produces economic efficiencies, looking at the competition system as a whole, it would be unreasonable if the significance of efficiencies were to be recognised under Article 101 but not Article 102[141]. Already in Post Danmark I, the Court argued that a dominant firm might seek to justify behaviour that would otherwise be caught by Article 102, in particular by arguing that it is objectively necessary or that any exclusionary effect on the market is counterbalanced or outweighed, by advantages in terms of efficiency that also benefit consumers[142]. Thus, the Court held that a dominant undertaking might prove that its practice does not fall foul of the prohibition in Article 102 TFEU by showing that the effects which that practice may produce are counterbalanced, if not outweighed, by efficiencies which also benefit consumers, in particular in terms of price, choice, quality or innovation. From the burden of proof perspective, these considerations convert into a general rule according to which a competition authority discharges its burden if it establishes that a practice of a dominant undertaking is liable to affect, through the use of resources or means other than those on which normal competition rests, a structure of effective competition, without it being necessary for it to show that that practice has, in addition, the capacity to cause direct harm to consumers. Still, on the other hand the dominant undertaking in question may escape the prohibition laid down in Article 102 TFEU by showing that the exclusionary effect which may result from the practice in question is counterbalanced, if not outweighed, by positive effects for consumers[143].

Alternatively, the evidence adduced by a dominant undertaking about the absence of concrete exclusionary effects may at most constitute an indication of the inability of the conduct in question to produce anti-competitive effects, but cannot be considered sufficient, in itself, to exclude the application of Article 102 TFEU, as the classification of a practice as abusive does not require it to be established that its result has been

[141] WHISH and BAILEY, *Competition Law*
[142] Court of Justice of the EU, Judgement of 27 March 2012, *Case C-209/10, 'Post Danmark I'*, ECLI:EU:C:2012:172.
[143] Ibidem, para. 41-48

achieved. Article 102 TFEU seeks to penalise the abuse of dominance irrespective of whether such an abuse has been successful or not[144].

The CJEU also examined whether the undertaking's intention should be considered in the assessment. In this respect, it was reaffirmed that the abuse of dominant position, prohibited under Article 102 TFEU, is an objective concept, based on the anticompetitive effects that the conduct is able to produce. The competition authority must show that, first, the practice had the capacity, when it was implemented, to produce the anticompetitive effect, in the sense that it was capable of making it more difficult for competitors to enter or remain in the market in question and of affecting the structure of that market, and, second, that the practice itself was based on the exploitation of means other than those inherent in competition based on the merits. The proof of an intentional element is not required in either of the two elements, and it may constitute at most a circumstance of fact.[145] This means that a conduct can be abusive irrespective of the intention of the dominant firm and the lack of intent will not be, on its own, a defence to a charge of abuse[146]. On the contrary, however, the evidence of such an intent, while it still cannot be sufficient in itself, constitutes a fact that may be taken into account in order to determine that there has been an abuse of dominance[147].

Another important question that was referred to the CJEU was whether a practice, although lawful outside the framework of competition law, may, when implemented by an undertaking in a dominant position, be classified as abusive solely on the basis of its potentially anticompetitive effects, or such a classification also required that that practice was implemented by means or resources other than those on which normal competition rests. In case the second option was the correct one, it was further asked which were the criteria for distinguishing the means or resources proper to normal competition from those proper to distorted competition.

The Court held that, due to the objective evaluation of the conduct that is at the base of the concept of abuse, the unlawfulness of that conduct is independent from the qualification provided from any other field of law. The only element that needs to be an object of the assessment is the possibility of the conduct to produce exploitative or exclusionary effects. These effects should not be purely hypothetical and the actual circumstances that were present when the practice was held need to be considered, not some particular circumstances that were not existent and that were not likely to happen[148].

In general, it is not the purpose of competition law to protect competitors from dominant firms' genuine competition based on factors such as higher quality, novel products, opportune innovation or otherwise better

[144] Case C-377/20, para. 49-58
[145] Case C-377/20, para. 59-64
[146] WHISH and BAILEY, *Competition Law,* 199
[147] Court of Justice of the EU, Judgement of 30 January 2020, *Case C-307/18, 'Generics (UK) Ltd v CMA'*, ECLI:EU:C:2020:52, par. 162
[148] Court of Justice of the EU, Judgement of 6 October 2015, *Case C-23/14, 'Post Danmark'*, ECLI:EU:C:2015:651, para 65.

performance[149]. As for the actions that dominant undertakings can implement to defend themselves from competitors, in the light of their special responsibility to avoid behaviours that could prejudice an effective and undistorted competition in the internal markets, they need to be delimited to the means of normal competition, which is the merit-based competition, meaning the competition situation in which consumers profit through lower prices, better quality and a wider choice of new or more efficient goods and services[150]. The Court defines as means out of the merit-based competition, any practice which the undertaking has no economic interest for, except the elimination of competitors from the market in order to later increase prices thanks to the monopoly condition as well as practices that an as-efficient but not dominant competitor could not adopt because such a practice is based on the exploitation of resources and possibilities that only a dominant undertaking can access[151]. In this way, the Court has pointed to different legal tests that can be used in order to define a conduct as abusive. The 'profit sacrifice' and the 'no economic sense' tests are indeed two approaches that have been largely used and discussed. In accordance with the first test, a practice would be abusive where it entails, for the dominant firm, a profit sacrifice relative to another practice that would not have the same anticompetitive effects, while for the second test a practise needs to be considered abusive if it cannot be explained on other grounds other than the restriction of competition, meaning that the only plausible purpose is anticompetitive[152]. However, these tests capture only a small fraction of cases, those in which a practice is inherently at odds with competition on the merits, not considering that most conducts caught by provisions on abuse of dominant position are known to be reasonably pro-competitive, having an economic rationale beyond their restrictive impact[153]. A useful benchmark that can be additionally used is the consumer welfare test, according to which a practice would be prima facie prohibited where its net impact on consumer welfare, the result of a balancing of the pro- and anticompetitive dimensions of behaviour, is negative. The second main test considered by the Court is the 'as efficient competitor test', according to which the legality of conduct would be assessed by reference to the behaviour of a competitor that is at least as efficient as the dominant firm. However, it is more than a test, lacking the requirement of precision to be operational in specific cases, it operates as a principle that informs the conditions under which specific issues are assessed, defining the conditions to evaluate the lawfulness of some practices[154].

The absence of a unique test to evaluate the lawfulness of every single conduct implies that there is no unambiguous threshold to refer to, but the approach needs to be tailor-made for the single case, considering

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[149] European Commission, *DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses*, 2005

[150] Case C-377/20, para. 74-75, 85.

[151] Case C-377/20, para. 76-77. In the same direction, Court of Justice of the EU, Judgement of 3 July 1991, *Case C-62/86, 'AKZO Chemie BV v Commission of the European Communities'*, ECLI:EU:C:1991:286, par. 71

[152] COLOMO, *What is an Abuse of Dominant Position?* and *Case C-62/86, 'AKZO Chemie BV v Commission of the European Communities'*

[153] COLOMO, *What is an Abuse of Dominant Position?*

[154] Ibidem

the peculiarities of the facts and the whole context that surrounds the assessed conduct. This leaves Commission and EU Courts great freedom in choosing the instruments for their evaluation, allowing them to consider all the empirical circumstances which results are worthy to be included and to examine under Article 102 also new conducts that exceed traditional legal limits and tests. To the specific traditional forms of abuse reported in the Commission Notice, such as exclusive dealing, tying and bundling, predation, refusal to supply and margin squeeze, that still can take place in the digital markets, new types of conduct are now assessed, as the self-preferencing in Google Shopping Case, allowing the competition regulation to keep up with the time, but at the same time leaving uncertainties to the dominant undertakings that operate in this sector, which cannot be sure that a conduct they implement to improve their position within the market or to generate more revenue will not ultimately be considered abusive[155]. Besides, unlike Article 101, which condemns anti-competitive conduct, the prohibition of Article 102 may be extended to situations in which an undertaking exploits its position purely for its own benefit, without reference to the effect that this behaviour may have on competitors[156]. This context opens up new horizons for the application of competition law in the digital sector and therefore, as it will be analysed later, the traditional instruments need to be adapted to the digital reality or replaced by new ones.

The lack of certainty can be brought back to the fact that competition law is missing some kind of social rationale for competition policy[157]. There is disagreement about what exactly, in addition to the consumer welfare and to the efficiency of the internal market, can constitute possible additional goals of competition law, and whether they can coexist, but within them it would be possible to include economic freedom and the process of competition, protecting competitors, fairness, public policy and socio-political factors[158]. Adding social goals, such as fairness, could help in analysing the nature of the abuse of dominance in digital markets, as competition cases bring intervention into the business of information intermediaries, whose role goes well beyond business to affect issues such as society and politics in general, and at the same time competition law in digital markets often interacts with other branches of law[159]. This context creates the possibility for a place for the idea that social goals affecting the interpretation and implementation of EU competition law are evolving and are highly dependent on the institutional and political context[160]. For example, taking fairness considerations into account at some stage of investigations, preferably while formulating the theory of harm,

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[155] European Commission, *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
[156] COLINO, *Competition Law of the EU and UK,* 311
[157] GERARD, *Fairness in EU Competition Policy: Significance and Implications*, in 9(4) *Journal of European Competition Law & Practice* 211-212 (2018)
[158] JONES and SUFRIN, *EU Competition Law: Text, Cases, and Materials (8th edition*), 26-28
[159] MÄIHÄNIEMI, *Competition Law and Big Data,* 96
[160] LIANOS, *Some Reflections on the Question of the Goals of EU Competition Law,* in 3 *CLES Working Paper Series* (2013) and WU, *After Consumer Welfare, Now What? The "Protection of Competition" Standard in Practice, Competition Policy International,* in 14 *Columbia Public Law Research* 608 (2018)

could be of help in complicated information related abuses of dominance cases, in which fairness could be identified as at least accompanying the goal of competition law, where information, as discussed before, could be considered as commons[161].

Using the presence of commons or commodity as a tool for identifying the cases in which fairness considerations can be applied as a goal of competition law is a possibility that, accepting a notion of commons which includes any fundamental, universally available infrastructure that each user can use for whatever he or she desires, subject only to the etiquette of sharing these commons, would allow to encompass digital platforms whose role is spreading beyond business considerations, moving more into affecting society at large, and consider as abusive conducts of those platform which do not seemingly clash against efficiency of consumer welfare[162]. On the other hand, however, the concept of fairness is not easy to be defined and, together with other non-competition related considerations, could lead to the entrenching of the special responsibility of dominant online platforms, potentially damaging to the innovation markets, as those platforms, and in particular information intermediaries could be seen in terms of common carrier, which are expected to behave fairly, not discriminating against rivals which are also their customers, expanding common carrier obligations in relation to non-indispensable inputs[163].

2.2 Elements of article 102 TFEU

Before considering the problematic elements, it can be useful to consider the whole definition of abuse of dominant position provided by Article 102:

'Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.'

Therefore, in order to have an abuse of dominant position under Article 102, in addition to being carried out by an undertaking, which has been defined in Höfner as any entity engaged in an economic activity, regardless of its legal status and the way in which it is financed, the abusive conduct must have an effect on inter-state trade, the undertaking needs to have a dominant position, or if two or more undertakings they need to be collectively dominant, and that dominance must be held in the whole or substantial part of the internal market[164]. Some of these thresholds do not create particular problems in their application to the digital reality.

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[161] MÄIHÄNIEMI, *Competition Law and Big Data,* 97

[162] MÄIHÄNIEMI, *Competition Law and Big Data* and WU *The Curse of Bigness: Antitrust in the New Gilded Age*

[163] COLOMO, *On the Amazon Probe: Neutrality Everywhere (or the Rise of Common Carrier Antitrust),* in *Chillin'Competition,* 2018 [Online] Available at: https://chillingcompetition.com/2018/09/25/on-the-amazon-probe-neutrality-everywhere-or-the-rise-of-common-carrier-antitrust/ [Accessed 3 June 2022]

[164] Court of Justice of the EU, Judgment of 23 April 1991, *Case C-41/90, 'Klaus Höfner and Fritz Elser v Macrotron GmbH*', ECLI:EU:C:1991:161

For instance, all the operators in the digital markets are undertaking as by the definition provided article 1(1) of the Directive 2015/1535 the information society services are provided for remuneration, therefore requiring an economic activity.

In the same way, the effect on inter-state trade, seems to constitute a requirement easily fulfilled by the vast majority of the operators of the digital markets. The European Court of Justice tried to provide a definition in Société Technique Minière v Maschinenbau Ulm, in which it was held that 'it must be possible to foresee with a sufficient degree of probability on the basis of a set of objective factors of law or of fact that the agreement in question may have an influence, direct or indirect, actual or potential, on the pattern of trade between the Member States'[165]. As an extreme reading of this report would permit the application of the EU law to almost any situation, the Commission tried to narrow the scope by stating, in its Guidelines on the Effect on Trade Concept Contained in Articles 101 and 102 of the Treaty, that the effect on trade must be appreciable[166]. To determine if the effect is appreciable, however, a case-by case evaluation is again required, as the Commission stated that this threshold is parametrised to the capability of the practices of affecting trade between member states by their very nature, being lower when they are not, as well as to the strength of the market position of the undertakings concerned[167]. Therefore, market share is an important factor, and the European Commission makes reference to the roughly consistent 5 per cent applied by the Court of Justice, but not a decisive one[168]. In particular, what needs to be taken into account is the turnover of the undertakings in the products concerned. In these regards, the Court held that, although the products in question accounted for just 3 per cent of the sales in national markets, the agreements were capable of appreciably affecting trade due to the high turnover of the relevant parties[169]. Concerning agreements, the Commission set out some quantitative criteria which should suggest in principle show that agreements do not affect trade that consist in the aggregate market share of the parties not exceeding 5 per cent and, in the case of horizontal agreements, the aggregate turnover of the parties not exceeding €40 million, and for vertical agreements the turnover of the supplier of the products being below this threshold[170]. Considering that Articles 101 and 102 share this same requirement, the same principles should theoretically be applied to abusive conducts of dominant undertakings which, in order to be dominant, will easily surpass the threshold set out by the Commission which require the effect to be appreciable. Of course, even if under Regulation 1/2003 national courts must apply Article 102 when applying national competition law to an abuse of a dominant position that has an effect on trade between Member States,

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[165] Court of Justice of the EU, Judgment of 30 June 1966, *Case C- 56/65, 'Société Technique Minière v Maschinenbau Ulm'*, ECLI:EU:C:1966:38

[166] COLINO, *Competition Law of the EU and UK* and European Commission, *Guidelines on the Effect on Trade Concept Contained in Articles [101 and 102] of the Treaty*, 2004

[167] European Commission, *Guidelines on the Effect on Trade Concept*, par. 45

[168] Ibidem, par. 46

[169] Court of Justice of the EU, Judgment of 7 June 1983, *Cases C- 100–103/80, 'Musique Diffusion Française v Commission cases'*, ECLI:EU:C:1983:158

[170] European Commission, *Guidelines on the Effect on Trade Concept*, par. 52

this does not preclude them from adopting or applying on their own territories stricter national laws controlling unilateral conduct engaged in by undertakings, and the obligation is without prejudice to the application of national laws that predominantly pursue an objective different from those pursued by Articles 101 and 102[171]. This analysis explains why this requirement is easily met by undertakings which operate in the digital markets and that could be subjected to an investigation for an abuse of dominant position under Article 102. Most of the services provided by dominant online platforms are indeed cross border and the market share of the undertaking considered is usually much higher than the 5 per cent required by the Commission and by the Court of Justice, keeping in mind the normally occurring winner takes all condition generated by the network effects and positive externalities.

In the same way, the fact that dominance, which will be considered in the next paragraphs, must be held in the whole or substantial part of the internal market, is a threshold that can be easily reached in the digital sector. Of course, no problem arises when an undertaking is dominant throughout the Member States of the EU, but the position may be less obvious where dominance is localised, as only in one Member State or in a part of it[172]. Neither the Court of Justice nor the Commission have laid down a percentage of the internal market which is critical in determining what is substantial[173]. Additionally, the meaning of substantial part is, open to interpretation, and is likely to be an inconstant factor which has changed throughout the evolution of the EU, making previous case law not always a fail-safe guide to future determinations[174]. It also constitutes a concept that must be related to the specific market for the product under analysis and is not limited to an examination of the size of the absolute geographic area identified in defining the market's boundaries[175].

More in general, even if a single Member State may not automatically be substantial, areas of Member States can be, and at the same time the EU can support several substantial markets in the same product as long as in each the conditions of competition are different[176]. In the Suiker Unie case the Court held that it would be necessary to take into account the pattern and volume of the production and consumption of the said product as well as the habits and economic opportunities of vendors and purchasers[177].

It has been stated before that most of the undertakings offering information society services are indeed small and medium-sized enterprises (SMEs), with few large platforms generating the biggest share of the overall value of the digital markets. Both the requirements set in Article 102 of the effect on inter-state trade and the

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[171] Council Regulation (EC) 1/2003 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, Article 3(2) and Article 3(3)
[172] WHISH and BAILEY, *Competition Law,* 193
[173] Ibidem
[174] COLINO, *Competition Law of the EU and UK,* 335
[175] Ibidem
[176] Court of Justice of the EU, Judgment of 14 February 1978, *Case C -27/76, 'United Brands Company e United Brands Continentaal BV v Commission'*, ECLI:EU:C:1978:22
[177] Court of Justice of the EU, Judgment of 16 December 1975, *Joined cases 40 to 48, 50, 54 to 56, 111, 113 and 114/73, 'Cooperatieve Vereniging 'Suiker Unie' UA v Commission'*, ECLI:EU:C:1975:174

fact that dominance must be held in the whole or substantial part of the internal market, may not allow action against the small platforms which operate in only one Member State or in a an even more limited area of a Member State, but it is useful to remember that it is nevertheless possible for the conducts of those platforms to be assessed under the national competition law, which usually does not have these two requirements. For instance, under the Italian national competition norm regulating the abuse of dominant position, Article 3 of law 287/1990, it is only required for the undertaking to have a dominant position in the national market or in a relevant part of it, and in some decisions even a city has been considered a relevant part of the internal national market[178]. This implies, however, that from the EU perspective almost only the limited number of big online platforms which operate in more than one Member State will potentially be investigated by the Commission under Article 102, leaving the great amount of small platforms to the competence of national antitrust authorities.

Other requirements, however, provide room for greater doubt concerning their application to the digital markets. To further elaborate, the instruments traditionally used by the Commission and by the European courts in assessing those requirements need an adaptation to the particular reality that has been represented before. The main problems are created by the dominance requirement, which requires to preliminarily define the relevant market, and by the birth of new theories of harm, which is allowed by the general and open definition of abuse that we have considered in the previous paragraph but that at the same time requires the design of new tools that can be used in the assessment and that differ from those traditionally used for other well tested theories of harm, which already have an established case law to support them.

2.3 Problematic elements: a) market definition

In order to decide whether an undertaking is dominant it is preliminary necessary to define a relevant market that will provide the framework within which the presence and behaviours of the undertaking will be analysed, identifying the product and geographical market. For the relevant product market, the legal test applied looks at the interchangeability of goods and services, as goods and services which can be regarded as interchangeable or substitutable because of their characteristics, prices and intended use, are within the same product market[179]. For the purpose of delimiting the market, those characteristics of the products by virtue of which they are particularly apt to satisfy an inelastic need and which are interchangeable with other products only to a limited

[178] Italy, Law of 10 October 1990, n. 287, 'Norme per la tutela della concorrenza e del mercato'
Consiglio di Stato, Sez. VI, Judgment of 14 December 2020, decision n. 7991, '*Autorità Garante della Concorrenza e del Mercato v Società Cooperativa P and R. Soc. Coop*'
[179] WHISH and BAILEY, *Competition Law*, 22

extent need to be investigated[180]. The Court of Justice further elaborated on the topic holding that the concept of the relevant market implies that there can be effective competition between the products or services that form part of it and that a sufficient degree of interchangeability between all the products or services forming part of the same market in so far as a specific use of such products or services is concerned is a prerequisite[181]. Furthermore, interchangeability or substitutability is not to be assessed solely in relation to the objective characteristics of the products and services at issue, but the conditions of competition and the structure of supply and demand on the market must be taken into consideration as well[182].

The main aspect considered for market definition is therefore the demand substitutability, but also the supply substitutability may be taken into account. Traditionally the Commission approach in defining the relevant market has followed the rules and the system established in the Notice on Market Definition, which focuses on the SSNIP ('small but significant non-transitory increase in price') test as the instrument used to study the demand-side substitutability, even if in some cases it was stated that this test is not required, as the methodology set out in the Notice was merely an illustration of the way in which market operated[183]. According to the SSNIP test, what needs to be investigated is whether the parties' customers would switch to readily available substitutes or to suppliers located elsewhere in response to a hypothetical permanent small but significant, in the range of 5 to 10 per cent, relative price increase in the products and areas being considered, and if the price increase is made unprofitable by the substitution, because of the resulting loss of sales, additional substitutes and areas are included in the relevant market[184].

In the digital world, however, market boundaries might not be as clear as they were in traditional markets, as they may change very quickly. The products are heterogenous, technologically complex and may have multiple uses and are embedded in fast-changing technological markets, which tend to evolve rapidly due to innovation, rapid application development capability and relatively low entry barriers[185]. Other problems are provided by the presence of zero-prices markets, in which the SSNIP test cannot be used, as it would not generate meaningful results, and by the fact that in the case of multi-sided platforms the interdependence of the sides becomes a crucial part of the analysis, which make the whole operation more complicated[186]. Besides, prices play a different role when network externalities are present, as it is not possible to read directly from

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[180] Court of Justice of the EU, Judgment of 21 February 1973, *Case C-6/72, 'Europemballage Corporation and Continental Can Company Inc. v Commission of the European Communities'*, ECLI:EU:C:1973:22, par. 32

[181] Court of Justice of the EU, Judgment of 30 January 2020, *Case C-307/18, 'Generics (UK) Ltd and Others v Competition and Markets Authority*', ECLI:EU:C:2020:52, par. 129

[182] Ibidem

[183] European Commission, *Notice on the Definition of the Relevant Market for the Purpose of Community Competition Law* (OJ C372/5) (Notice on Market Definition), 1997, par.7
European Commission, Decision of 14 July 1999, *Case IV/D-2/34.780, 'Virgin/British Airways'*.

[184] European Commission, *Notice on the Definition of the Relevant Market,* par. 17

[185] HARBOUR and KOSLOV, *Section 2 in a Web 2.0 world: an expanded vision of relevant product markets*, in 76(3) *Antitrust Law Journal* 769-797 (2010)

[186] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 44

the prices the total consumer value of the last unit purchased, making the computation of the variations of consumer welfare much more difficult. The situation is even more complicated in two-sided markets, in which the demand for the services of a two-sided platform by the users on side A depends on the price of the service to these users, as well as on the number of users on side B, and the demand of users on side B depends in turn on the number of users on side A, therefore requiring much more complex statistical methods and much richer data[187]. Even if the SSNIP test was applicable, authorities would need to assess the change in demand on one side of the platform to a SSNIP, predict the change in demand on the other sides in response and determine what the market-balancing prices on these other sides would be in response to the change in demand, then repeating this exercise for each side of the market, and with a simultaneous increase in prices on both sides[188]. Such an operation, completed with quantitative methods, would indeed be very demanding, as it would require a reliable estimate of demand elasticities and the value of the cross-platform network externalities[189].

These problems have triggered the development of new instruments or at least the adoption of a new perspective. For the zero-prices markets, the first possible solution suggested is the introduction of a small but significant non-transitory decrease in quality ("SSNDQ") test as an alternative when non-price competition is important. An example of the application of this test, which would try to estimate how many users would switch from a service in case of small but significant non-transitory decrease in the quality of the service offered, would be to ask whether users would switch to a different search engine if their existing provider were to decrease the standards of data privacy available or to increase the amount of advertising to which they are exposed[190]. However, this test has already received much criticism. First of all, the test has rarely been applied and is particularly demanding in terms of data and would face the same difficulties of balancing between the two sides that the SSNIP test shows[191]. Moreover, the concept itself of a qualitative small but significant decrease is difficult to be applied, considering that quality doesn't have a direct mathematical scale to be measured with and its forming elements are not uniform, but change from user to user[192]. The fact that the service is provided for free also creates the free effect, according to which the zero-price can induce consumers to accept conditions they normally would not accept, distorting the rationality of their choices[193]. There is in fact a positive effect associated with engaging in zero-price transactions which triggers an outsized increase

[187] Ibidem
[188] OECD, *Abuse of dominance in digital markets,* 2020, 16 [Online] Available at: www.oecd.org/daf/competition/abuse-of-dominance-in-digital-markets-2020.pdf [Accessed 5 June 2022]
[189] Ibidem
[190] WHISH and BAILEY, *Competition Law*
[191] OECD, *Abuse of dominance in digital markets,* and CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era*
[192] F. FERRARI, *Le concentrazioni nei mercati data-driven: la privacy rinnegata*, in 4 *Diritto del Commercio Internazionale*, 2021, 1019
[193] GAL and RUBINFELD, *The Hidden Cost of Free Goods: Implications for Antitrust Enforcement*, in 80(3) *Antitrust Law Journal* 9 (2016)

in valuation and demand, as indicated by consumers' revealed preferences, causing consumers to engage in behaviours that appear to be wasteful or inefficient, making the application of the test problematic[194]. Despite all these problems, because of which it cannot represent an ultimate solution, the SSNDQ test can still be a useful instrument to be used for a qualitative analysis to support a market definition, avoiding an approach that relies solely on platform characteristics.

In fact, a second option, already used by the Commission in merger cases concerning platforms and zero-price services, is to define the market on the basis of its characteristics, assessing the service functionalities. For example, in the Apple/Shazam merger, already considered before, the Commission did not use neither the SSNIP test nor the SSNDQ test, but just assessed the fact that Apple, developing OSs for different types of devices, offered those OSs as platforms for software solutions and/or app and that the markets for software solutions and/or app platforms were indeed the relevant market[195].

In the past, the Court of Justice referred to a qualitative method as well, basing the market definition on distinctive characteristics of the products. In the United Brand case the Court, which had to decide whether bananas were a separate product market, or whether they belonged to fresh fruit market, ruled that bananas dispose of certain characteristics which are not present to similar extent in any other fruit, namely appearance, taste, softness, seedlessness, easy handling, a constant level of production and satisfying the needs of very young, old and sick[196]. Those characteristics were the reason why the banana market, in the Court's opinion, was sufficiently distinct from the other fresh fruit markets, even if a small degree of substitutability could be found and in some periods of the. year the consumption of bananas was influenced by the prices of other fruits[197]. These approaches, despite lacking the same degree of theoretical rigour of the SSNIP test, may be particularly useful in the case of multi-sided platforms, in which reasoning related to prices are often impossible or extremely difficult nevertheless[198]. In fact, for the reasons previously explained, when studying issues associated with multi-sided platforms, competition policy should analyse all the sides and consider the ways in which they interact. Considering that in most cases platforms provide more than one service, it can be safer to start the analysis keeping the several markets separate, instead of studying one comprehensive market, but still keeping in mind the relationships existing between the different markets. In order to do that, using a qualitative method, based on the characteristics of the products or services in order to differentiate them from other products or services with different characteristics but that could be brought back to the same macro-category, can represent the only solution, especially for those products or service whose price is zero.

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[194] NEWMAN, *Antitrust In Zero-Price Markets: Foundations*, in 164(1) *University of Pennsylvania Law Review* 149-206, 185 (2015)
[195] European Commission, Decision of 6 September 2018, *Case M.8788 – 'Apple/Shazam*', para. 79-85
[196] Case C-27/76, par. 31
[197] Ibidem, para. 30-35
[198] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 45

It has been argued that defining relevant market may not be the correct instrument to be adopted in antitrust proceedings[199]. It has also been suggested that in digital markets, less emphasis should be put on the market definition part of the analysis, and more importance attributed to the theories of harm and identification of anti-competitive strategies[200]. While theories of harm can be a useful instrument in identifying an abusive behaviour, for the abuses of dominant position the market definition is nevertheless a fundamental element, as it is not possible to establish the dominance of an undertaking without defining the area in which its presence needs to be assessed. The conducts are indeed considered abusive only when the undertaking is dominant, not being unlawful conducts per se.

Regarding the relevant geographical market, it comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous, and which can be distinguished from neighbouring areas because of the conditions of competition are appreciably different in those areas[201]. Even if often at first sight the relevant market for digital markets operators, especially the most relevant ones, could be defined as global, such an approach may not be always the correct one[202]. In fact, the Commission checks the initial working hypothesis, based on broad indications as to the distribution of market shares between the parties and their competitors and a preliminary analysis of pricing and price differences at national and UE level, against an analysis of demand characteristics, such as the national and local preferences, the current purchasing patterns of customers, product differentiation/brands in order to assess whether the customers of the parties would switch their orders to companies located elsewhere in the short term and at a negligible cost, making companies in different areas a real alternative source of supply for consumers[203]. If necessary, supply factors can also be checked, in order to be sure that undertakings located in different areas do not incur in obstacles in developing their business on competitive terms throughout the whole geographic market, examining all the possible obstacles and barriers isolating companies located in a given area from the competitive pressure of companies located outside that area, including cultural and linguistic factors that could affect the local preferences and the view of customers and competitors, determining the precise degree of geographical market interpenetration[204].
For software and Internet products Internet access, which is cheap and unlimited by distance, replaces the costs of transport, spoilage and other issues that are usually accounted for while defining the relevant

[199]KAPLOW, *Why(Ever)Define Markets?,* in 124(2) *Harvard Law Review* 437-517 (2010)
[200]CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era*
[201] European Commission, *Notice on the Definition of the Relevant Market for the Purpose of Community Competition Law (OJ C372/5) (Notice on Market Definition)*,1997, par. 8
[202] MÄIHÄNIEMI, *Competition Law and Big Data*, 82
[203]European Commission, *Notice on the Definition of the Relevant Market*, para. 28-29
[204]European Commission, *Notice on the Definition of the Relevant Market*, par. 30

geographical market, making these aspects irrelevant[205]. Even so, despite the fact that certain services, such as search, email and file sharing, cannot be limited to a particular area or state, markets may still be limited geographically due to such factors as language or local preferences, which may be able to not encourage the establishment of an undertaking's business in a certain country, even if it is an information society service operator and the physical cost would be close to zero[206]. This, along with what has been previously discussed about the SMEs in the analysis of the Article 102 TFEU requirements of effect on inter-state trade and the fact that dominance must be held in the whole or substantial part of the internal market, makes it possible to restrict the boundaries of the relevant geographical market to some Member States or some of their areas, not including every time the whole EU territory, meaning that the analysis and the subsequent definition of the relevant geographical market cannot be ignored just because an undertaking operates in the digital markets.

2.4 Problematic elements: b) Definition of dominance

Once the relevant market has been defined, an assessment of the dominance of the undertaking in that relevant market is required under Article 102 TFEU. As it has been pointed out before, the conducts prohibited and sanctioned under Article 102 TFEU presuppose their being carried out by a dominant undertaking, which is burdened by that special responsibility not to allow its conduct to impair genuine undistorted competition on the common market[207]. The assessment, which tries to determine the substantial market power, requires a realistic analysis of the competitive pressure both from within and from outside the relevant market, looking for the presence of a combination of several factors which, taken separately, are not necessarily determinative[208]. These factors are (*i*) the market position of the dominant undertaking and its competitors, which can be outlined looking at the constraints imposed by the existing supplies from actual competitors and by their position on the market; (*ii)* the constraints imposed by the credible threat of future expansion by actual competitors or entry by potential competitor; *(iii*) the countervailing buyer power, *i.e.* the constraints imposed by the bargaining strength of the undertaking's customers[209].

As for the first factor, it is necessary to consider who the actual competitors in the relevant market, if present, are. A useful first indication in this direction, showing the market structure and the relative importance of the undertakings active on it is provided by the market shares[210]. In fact, market shares allow market power to be derived indirectly by inference[211]. Generally speaking, the higher the market share and the longer the period

[205] WALLER, *Antitrust and Social Networking,* in 90 *NCLR* 1771 (2012)
[206] MÄIHÄNIEMI, *Competition Law and Big Data,* 85
[207] see *supra* footnote n. 134
[208] WHISH and BAILEY, *Competition Law,* 184
[209] Ibidem
[210] European Commission, *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
[211] H. HOVENKAMP, *Antitrust and Platform Monopoly,* 2050

over which it is held, the more likely it is that the undertaking will be considered dominant. Above a market share of 50 per cent, in the absence of exceptional circumstances pointing otherwise, a presumption of dominance exists, with the undertaking bearing the burden of establishing that it is not dominant.[212] Even if a monopoly is difficult to achieve in absence of a statutory or natural monopoly, the percentage of market share held by a company can be really high. For example, in each case regarding Google, the Commission found that the company was dominant in national markets for general search services in the EEA and that its market shares exceeded 90 per cent in most countries[213].

The second aspect that needs to be considered assessing the market power is the presence of potential competitors. In this respect, barriers which disincentivise or impede possible competitors from entering the market need to be looked for. These barriers can be legal, as it happens with intellectual property rights, or can be represented by economic advantages, as economies of scale, the control of an essential facility, superior technology, first mover status and so on[214]. Cost and other impediments faced by customers if they want to switch to a new supplier, as the ones that arise from network externalities, need to be considered as well, as they may constitute barriers to expansion or entry for potential competitors considering initiating a competing business[215].

While what has been stated until now should be true for both traditional and digital markets, the latter's characteristics force additional remarks in the assessment of market power.

First, concerning the market shares, which represent the ratio of sales of an undertaking to the total sales in the market, it should be remembered that when there are network effects, the prices do not necessarily represent the value of the good or service to the consumers or to the firms which are selling them, so that the percentage of sales do not make much sense[216]. This is particularly evident when the price is equal to zero, but is true nevertheless in other two-sided markets, in which the prices on the two sides influence each other and cannot be directly considered on their own. Using market shares in markets in which some undertakings offer a service for free, while others charge a price, or in which a same undertaking offers both a zero-price service and an

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[212] Court of Justice of the EU, Judgment of 3 July 1991, *Case C-62/86 (1991) 'AKZO Chemie BV v Commission'*, EU:C:1991:286, par. 60

[213] European Commission, Decision of 27 June 2017, *Case AT.39740, 'Google Shopping'*, para. 271–330, on appeal Tribunal of EU, Judgment of 10 November 2021, *Case T-612/17, 'Google and Alphabet v Commissio*n'; European Commission, Decision of 18 July 2018, *Case AT.40099, 'Google Android',* para. 674–727, on appeal *Case T-604/18*; European Commission, Decision of 20 March 2019, *Case AT.40411, 'Google Search AdSense',* on appeal *Case T-334/19*

[214]Tribunal of EU, Judgment 10 July 1990, *Case T-51/89, 'Tetra Pak Rausing SA v Commission'*, ECLI:EU:T: 1990:41;
Tribunal of EU, Judgment of 1 July 2010, *Case T-321/05, 'AstraZeneca v Commission',* ECLI:EU:T:2010:266, para. 276–283
Case 27/76 'United Brands Company v Commission'
European Commission, Decision of 4 May 2017, *Case AT.40153 'Amazon'*, par. 65(3)
European Commission, Decision of 18 July 2018, *Case AT.40099 'Google Android'*, para. 621–626

[215] European Commission, *Guidance on the Commission's enforcement priorities*, 2009, par. 17

[216] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 48

upgraded paying version, as it happens in music platforms, can create confusion and uncertainties[217]. Furthermore, in two-sided markets that offer at least part of their product for free, information on sales is either unavailable or imprecise, requiring alternative proxies to replace the sales of the product[218].

In this direction, the amended German competition law includes proxies such as 'direct and indirect network effects, the parallel use of several services and the switching costs of users, the undertaking's economies of scale arising in connection with network effects, the undertaking's access to data relevant for competition and competitive pressure driven by innovation' as relevant factors that can be considered in the assessment of market power[219]. Even the amount of time spent intensively using the network can be used as an important indicator of the competitors' actual market position[220].

Additionally, in two-sided markets sufficient market power can be found on smaller shares than in more traditional markets, particularly where shares among the top firms are uneven, thanks to the fact that both high fixed costs and network effects operate to give larger firms a big advantage over small ones.[221] These advantages, which can generate an intermediation power that undertakings will try to acquire, conserve and possibly leverage into adjacent markets, can be reduced by widespread multi-homing and low switching costs[222]. In the same way, the possession of data that is not available to market entrants may lead to market dominance, which can be extended to adjacent markets where the same data conveys strong competitive advantages in providing complementary services, even to an undertaking that does not have particularly high market shares in a certain relevant market, but that has obtained those data in some other way[223].

Regarding switching costs for consumers, in digital markets they can play a particularly important role, especially if non-monetary costs, as for example the perceived cost of switching to a smaller network with less participants, which results in less possible interactions or, more in general, less network advantages, are included. This can result in high barriers for consumers who want to switch from one product or service to another, even if the monetary cost is zero. On the other hand, digital markets are fast-moving innovation-based markets, thus a new service or product can disrupt the present networks while the new network grows quickly, leading to a fast switch from one service to another. However, for the precise service provided by a platform which gained a winner takes all position, network effects and externalities can represent an incredible asset in

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[217] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 48
[218] MÄIHÄNIEMI, *Competition Law and Big Data,* 81
[219] Germany, Act against Restraints of Competition, 2013, as last amended by Article 4 of the Act of 9 July 2021, Section 18(3a).
[220] Bundeskartellamt, *Case Summary - Facebook, Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing,* 2019 [Online] Available at: https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B6-22-16.pdf?__blob=publicationFile&v=3 [Accessed 12 July 2022]
[221] H. HOVENKAMP, *Antitrust and platform monopoly,* 1962
[222] Ibidem, and CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 38
[223] CRÈMER, DE MONTOYE and SHWEITZER, *Competition Policy for the Digital Era,* 97. *see* as an example European Commission, *Press release: 'Antitrust: Commission opens investigation into possible anticompetitive conduct of Amazon for the use of sensitive data from independent retailers who sell on its marketplace*, 2019

maintaining its strength on the market and in impeding other platforms or operators from entering the market. Therefore, time is another factor that may be considered in order to establish the relevant period over which the dominance is alleged and over which the alleged abuse may have been realised.

In this context, adding other potential sources of evidence for establishing dominance could be useful. The OECD suggests some of these potential sources of evidence, matched with the issues that needs to be evaluated and assessed[224]. First, starting from the definition of the relevant market, it should be understood if the market that is being delimited corresponds to a platform, and if so, if it should be considered one multi-sided market or two interlinked markets. In order to do so, it is possible to look at the information regarding the platform's business model, such as the internal firm documents, analyst reports, information requests from market participants, the information regarding externalities, such as interviews or information requests with large customers on paying side or information from the firm regarding functionality, and the information regarding pricing strategies, which can be derived from evidence of cross-subsidising between different business units or internal documents on pricing. Additionally, for the purpose of incorporating non-price dimensions of competition, information regarding consumer preferences, acquired through surveys, analyst reports and interviews, should be considered, together with information regarding the firm and its competitors' view of the relevant dimensions of competition, which requires reference to internal documents and interviews, and information regarding innovation, for which it is possible to look at research and development spending, past patterns of product changes or new products, internal firm documents and analyst reports.

Concerning the aspects more directly connected to the factors assessing dominance, demand-substitutability can be evaluated through information regarding substitutes for consumers and limitations to substitution, as switching costs, for which it may be useful to use surveys, analyst reports, interviews and internal firm strategy documents. The data concerning sales can be useful to calculate demand elasticity, to estimate diversion ratios, and to conduct event studies. Interviews from recent, potential or failed entrants regarding costs, regulatory burden, network effects, technological factors and demand-side characteristics, as behavioural biases such as inertia, that advantage incumbents, together with information requests form the firm to validate potential entry barriers, acquired through internal documents such as business cases for investments, email correspondence, research report, and information regarding the role of data and network effects in the markets, acquired through analyst reports, internal documents and information requests, can represent a fundamental instrument to assess the presence of entry barriers and potential competitors. Regarding profitability, it is possible to use data form the firms, including the revenue and cost data to calculate the Lerner index[225], and commentary by investment analysts, internal documents or documents from financial advisors.

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[224] OECD, *Abuse of Dominance in Digital Markets*

[225] MILLS, *The Lerner Index of Monopoly Power: Origins and Uses*, in 101 *American Economic Review* 558-564 (2011)

As it can be seen, the OECD suggests the use of empirical sources of evidence, which require the collaboration of the undertaking under assessment and of the other undertakings which operate in the same relevant market or that have tried, or are trying, to enter it. These instruments, some of which are already used for traditional markets, may be fundamental in the process of establishing dominance in digital markets which, as it has been explained before, create issues for the application of the traditional mechanisms.
The emerging picture shows the necessity of an approach that has to include all the possible evidence, data, instruments that can help recreating a realistic image of the forces acting in digital markets. In fact, limiting to the traditional approach would translate in an inaccurate analysis of the reality of digital markets, not being able to include new conducts that could not be assessed through the traditional instruments, but that can be harmful for competition.

2.5 Problematic elements: c) Theories of harm

The last aspect of Article 102 TFEU applied to digital markets that is going to be analysed is theories of harm. In the paragraph about abusive conducts, the boundaries separating a legitimate conduct of a dominant undertaking from an abusive one have already been discussed. As it has been explained before, Article 102 TFEU does not provide a precise definition of abusive conducts, but there are few examples indicated at paragraph 2, as the direct or indirect imposition of unfair purchase or selling prices or other unfair trading conditions; the limitation of the production, markets or technical development to the prejudice of consumers; the application of dissimilar conditions to equivalent transactions with other trading parties, placing them at competitive disadvantage; the conclusion of contracts subject to the acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts. In addition to these conducts, others have been codified by the doctrine, by the competition authorities and by the jurisprudence, offering support in the assessment as they represent prototypes of abusive conducts. The category of exclusionary abuses is particularly rich of theories of harm, including exclusive dealing agreements, tying, refusal to supply, miscellaneous other non-pricing abuses, exclusivity rebates and other practices having effect similar to exclusive dealing agreements, bundling, predatory pricing, margin squeezing, price discrimination, refusals to license intellectual property rights or to provide interoperability information[226]. For all these conducts, precise rules have been identified, setting legal tests that allow the Commission, the Courts, the national authorities and the undertakings themselves to understand if a certain conduct can be traced back to a particular scheme. As an example, exclusive dealing

The Lerner index is the standard measure of monopoly power. It is defined by $L = (P - MC)/P$, in which P is the market price set by the firm and MC is the firm's marginal cost. A perfectly, competitive firm charges *P=MC* so that *L=0,* meaning that the firm has no market power.
[226] WHISH and BAILEY, *Competition Law,* 211

agreements, which include both exclusive supply and exclusive purchasing obligations, have been discussed by the European Court of Justice in Hoffmann-La Roche v Commission, ruling that 'an undertaking which is in a dominant position on a market and ties 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 abuses its dominant position within the meaning of Article 102 of the Treaty, whether the obligation in question is stipulated without further qualification or whether is undertaken in consideration of the grant of a rebate'[227]. Once such a conduct has been identified, the next step is to investigate the possible presence of objective justification or verify if the conduct is economically efficient, as the Court stated in Intel that the undertaking can submit, during the administrative procedure, on the basis of supporting evidence, that its conduct was not capable of restricting competition and of producing the alleged foreclosure effects[228]. If in fact the dominant undertaking submits evidence that its exclusive purchasing agreement could not have a foreclosure effect, it will be necessary to assess whether the conduct it is actually capable of having such an effect, on the basis of the extent of firm's dominant position, the market coverage of the agreement, its terms and duration, the possible existence of a strategy aiming to exclude from the market competitors at least as efficient as the dominant undertaking[229].

As it has been shown in the example, those rules have been reconstructed starting from the European Court of Justice decisions and from the Commission indications, creating quite a solid framework for the assessment of conducts held by dominant undertakings. However, new conducts, not immediately fitting in the existing templates, can appear and, in case one wants to consider them abusive because they generate anticompetitive effects, require an intellectual effort to try to bring them back into those traditional categories. The refusal to deal, or refusal to supply, together with tying and exclusive dealing, is the most commonly investigate conduct in digital markets[230]. In fact refusal to deal, or refusal to supply, is one of the theories of harm that can better adapt to the digital world. Even if in general the right to choose one's trading partners and freely to dispose of one's property are recognised principles in the law of the Member States, there are circumstances in which the refusal on the part of a dominant firm to supply goods or services can amount to an abuse[231]. This theory of harm is particularly controversial because forcing dominant undertaking to supply, which might seem to be pro-competitive in the short term, enabling claimants to enter the market, might conversely be anticompetitive in the long term, if it ultimately discourages, to the detriment of consumers, the necessary initial investments, which in the digital markets are represented by research and innovation cost, along with the cost to operate the

[227] Court of Justice of the EU, Judgment of 13 February 1979, *Case C-85/76, 'Hoffmanm-La Roche v Commission'* ECLI:EU:C:1979:36, par. 89
[228] Court of Justice of the EU, Judgment of 6 September 2017, *Case C-413/14, 'Intel Corp v Commission',* ECLI:EU:C:2017:632
[229] Ibidem, par. 139
[230] OECD, *Abuse of Dominance in Digital Markets*
[231] WHISH and BAILEY, *Competition Law*

platform in the first place and to take part in the initial competition to become the platform of reference, because it would allow free-riders to take advantage of investments made by the dominant company[232]. Thus it has been suggested that this duty should be limited only to the cases in which a clear detriment to competition would follow from a refusal[233]. Refusal to supply mostly concerns vertical foreclosure. In that situation, the case-law has identified five issues which must be addressed, which require to assess if there is a refusal to supply, if the accused undertaking is dominant in an upstream market, if the product to which access is sought is indispensable to someone wishing to compete in the downstream market, if the refusal to grant access would lead to the elimination of effective competition in the downstream market and, finally, if there is an objective justification for the refusal to supply[234]. Furthermore, not only unconditional refusals can amount to an abuse, but also conditional refusal, which is a refusal to supply unless the purchaser agrees to certain terms, such as exclusivity, or constructive refusal, in which case the supplier agrees to deal, but proposing terms that make it difficult for the purchaser to compete, can as well result in a refusal to supply[235]. The constructive refusal could include, in digital markets, degrading the conditions for access to the input or failing to provide sufficient information to make use of the digital input in question[236].

The main point in this analysis, however, is to understand when the access should be considered indispensable, a concept which the EU Courts has also defined as 'essential facilities', used mainly for the cases in which the undertaking seeks access to a physical infrastructure, or 'objectively necessary'[237]. This theory, which originally was used in relation to the supply of raw materials[238], was later extended to intellectual property, assessing if the refusal by the owner of an intellectual property to license it to a third party could, in exceptional circumstances, involve an abuse[239]. In these regards, the Court stated that the refusal can amount to an abuse if, without the access to the information, would be impossible to create the product, if there is a demonstrable potential consumer demand for the would-be product, if there is no objective justification for the refusal and if the refusal would eliminate all competition in the secondary market[240]. As a further limitation, the Court highlighted that the economic viability of creating a new system compared to access the existing one of the dominant undertaking, based on the circulation of the product, is not a possible argumentation to demonstrate

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[232] Advocate General Jacobs, *Opinion in Case C-7/97, 'Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co.',* ECLI:EU:C:1998:264
[233] Ibidem
[234] WHISH and BAILEY, *Competition Law,* 732
[235] OECD, *Policy roundtables: Refusal to deal,* 2007 [Online] Available at: https://www.oecd.org/daf/43644518.pdf [Accessed 5 June 2022
[236] COLOMO, *Indispensability and Abuse of Dominance: From Commercial Solvents to Slovak Telekom and Google Shopping,* in 10(9) *European Competition Law & Practice* 532-551 (2019)
[237] Ibidem
[238] See as an example Court of Justice EU, Judgment Of 6 March 1974, *Joined Cases C-6 and 7/73, 'Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission of the European Communities'*, ECLI:EU:C:1974:18
[239] Court of Justice of the EU, Judgment of 6 April 1995, *Case C-241/91, 'P etc RTE and ITP v Commission'* also referred to as '*the Magill Case',* ECLI:EU:C:1995:98 as referred to in Case C-7/97, par. 39
[240] Case C-7/97, par. 40

that the first is not a potential alternative, but it would be necessary at least to demonstrate that it would not be economically viable to create a second system with a circulation comparable to the one of the system to which the access is required[241]. In short, the input to which access is sought must be something that is incapable of being duplicated, or which could be duplicated only with great difficulty. Therefore, an input will be indispensable if duplication is *(i)* physically impossible, as it happens with infrastructure, *(ii)* legally impossible, as it happens in the presence of property rights, or *(iii)* if it is not economically viable, keeping in mind that, as it has been explained before, it is not sufficient for a small firm to argue that, because of its smallness, it should be entitled to use its larger competitor infrastructure or system, but it is required to assess if the market is large enough to sustain a second facility such as the dominant firm's one[242]. In digital markets, however, it may not be that straightforward to determine whether an input is indispensable and whether it could be replicated by competitors as a response to any refusal to deal. As data play such an important role in digital markets, as they can be used to harness network effects, target consumers, develop personalised pricing and much more, someone has argued that the datasets of certain dominant players are prerequisite, and thus essential, for being able to compete in certain markets[243]. In this direction, some digital platforms have been considered capable of position themselves as mandatory bottleneck between operators, even competitors, and the consumers[244]. However, it is not clear that a refusal to provide data to one's competitors would constitute a refusal to deal in the context of competition law, as datasets are a collection of individual data points, and thus it is difficult to determine for sure in which cases a dataset would become indispensable, and whether the insights or value to be obtained from it could be obtained from other sources[245]. As an example, the non-substitutability of data used in the aggregate may result from the richness ("number of columns") and size ("number of rows") of a dataset, as it happens in particular when machine-learning algorithms, whose performance and efficiency largely depend on having been trained on large high-quality datasets, play a role[246]. In these regards, the Italian antitrust authority (AGCM) opened an investigation against Google because it was accused of hindering interoperability in sharing data on its platform with other platforms, while holding a dominant position in several markets that allow it to extract large amounts of data through the services it

[241] Case C-7/97, para. 45-46
[242] WHISH and BAILEY, *Competition Law*, 737
[243] OECD, *Big data: Bringing competition policy into the digital era – Background paper by the Secretariat*, 2016 [Online] Available at: https://one.oecd.org/document/DAF/COMP/WP3(2016)5/en/pdf [Accessed 5 June 2022]
[244] Stigler Committee on Digital Platforms, *Final Report*, 2019 [Online] Available at: https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf [Accessed 5 June 2022]
[245] KATZ, *Multisided Platforms, Big Data, and a Little Antitrust Policy*, in 54(4) *Review of Industrial Organization* 695-716 (2019)
[246] UK Competition and Market Authority, *Pricing Algorithms*: *Economic working paper on the use of algorithms to facilitate collusion and personalised pricing,* 2018 [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746353/Algorithms_econ_report.pdf [Accessed 5 June 2022]

provides[247]. In particular, the company which reported Google's conduct offered a dataset-app, which allowed people to get value of their data, as they could subscribe and insert their personal data, so that every time companies asked for those data, in a statistical, aggregated and anonymous form, for the carrying out of its activities of targeting consumers or other purposes, as the creation of statistical databases or enrichment instruments, they could obtain a reward for it. In order to facilitate the entry of data for the consumers, the company asked Google to individuate mechanisms that could allow users to transfer their data, detained by Google itself, to the database-app according to Article 20 GDPR, but did not receive an answer. The AGCM stressed the fact that in digital markets, often the competition leverage is represented by the availability of a large amount of data and their relevance, as thus they are essential, as from them the fundamental characteristics of the service, in particular in terms of innovation and personalization, depend[248]. The authority also considered the fact that, while the data acquired by Google are currently used in the online ads markets, in which they represent the fundamental element of the undertaking's dominant position, the pro-competitive application of the data portability right under Article 20 GDPR would open up to users the possibility of taking advantage of different and additional ways of enhancing those data, allowing new undertakings to offer new innovative forms of data processing, suggesting that innovation foreclosure is an important aspect to be consider in the assessment of the conduct of the dominant undertaking[249].

Going back to the more traditional theories of harm, the OECD tried to connect conducts observed in digital markets with potential abuse of dominance theories of harm[250]. The impossibility of the competitors of a firm to get access to an important input or technology needed to compete, may be brought back to the refusal to deal, if it can be proven that the input or technology is essential to compete, that the dominant firm owns or otherwise controls all of the input or technology, so that it is not possible to turn to any other undertaking, and that is feasible for the input to be shared, which can be demonstrated by past agreements to supply the input, or to an exclusive dealing theory of harm., if the dominant firm has obtained the input through an exclusive supply agreement.

When a dominant, vertically integrated firms is charging downstream rivals' higher prices, or offering less advantageous terms or quality, the margin squeeze theory of harm based on discrimination may apply, if the upstream input is important to compete and if the conduct results in higher prices or worse quality for consumers. In case consumers are not willing or able to switch to a different product not from the dominant

[247]AGCM, *Press release: A552 - Italian Competition Authority, investigation opened against Google for abuse of dominant position in data portability*, 2022 [Online] Available at: https://en.agcm.it/en/media/press-releases/2022/7/A552 [Accessed: 15 July 2022]
[248]AGCM, *Press release: A552*, *Allegato 1,* par. 15 [Online] Available at: https://www.agcm.it/dotcmsdoc/allegati-news/A552%20avvio.pdf [Accessed 15 July 2022]
[249] Ibidem, par. 17
[250] OECD, *Abuse of Dominance in Digital Markets,* 24

firm, the conduct may be reconducted to an exclusive dealing or loyalty rebate theory of harm, in cases consumers sign exclusive purchase contracts with a dominant firm, or are otherwise prevented from switching suppliers, or in cases the dominant firm offers loyalty rebates or payments to consumers based on the amount of inputs they purchase, or the proportion of their inputs coming from a dominant firm, while there is no objective justification for the conduct other than excluding competitors form the market or denying them scale. Even when consumers are compelled or incentivised to purchase different products together, the conduct could be considered abusive applying a bundling or tying theory of harm, if the firm with market power over the supply of a product conditions the purchase of that product on the purchase of another product, either through contractual or technical means, and the conduct cannot be justified if not for the exclusionary intent.

Those are some examples of theories of harm applied to conducts held in digital markets. However, it is important to realize that most of the traditional theories of harm need to be adapted in some way.

In predatory pricing, which is one of the easiest to demonstrate abusive conduct for traditional businesses, as it is sufficient to observe the mathematical fact that the dominant undertaking is selling its products below the cost of production, the proof required can be difficult to be acquired in digital markets, in which prices fluctuate rapidly and frequently and the two-sidedness creates the said complexity in evaluating the connection between prices and costs[251]. In addition to that, digital markets feature several firms that have acquired large market shares without being profitable for extended periods of time and investors appear to have determined that the long-term profit expectations of a firm are such that short and medium-term losses are justified[252]. Thus, business strategies and investment dynamics of digital firms should be considered as the assessment as well, making an almost simple analysis much more complex and open to discretion.

Margin squeeze, which consists in reducing competitors' margin through cross-subsidization or discrimination. In the first case, the dominant upstream supplier charges high prices, while charging low prices on its downstream operations, not allowing as efficient undertakings to actually compete in the downstream market. In the second case, a dominant supplier, charging downstream competitors a higher price than its own operations, raises competitors' costs and consequently forces them to raise their prices, relieving competitive pressure on the dominant firm and increasing its margin while resulting in higher prices, or worse quality and less innovation, for consumers. The self-preferencing, which will be considered with more attention in the last chapter concerning the Google Shopping case, has been reconducted to a discriminatory leveraging. In particular in vertically integrated digital markets, in which many services are offered at zero-price, non-price discriminations may be considered as well, as it could happen in case of a policy, for example limiting the amount of data that can be accessed, imposed by the dominant undertaking in the upstream market, applying

[251] KHAN, *Amazon's Antitrust Paradox*, in 126 *Yale Law Journal* 710-805, 725 (2017)
[252] Ibidem

only to competitors in the downstream market and not to the dominant undertaking itself, as conducts that may result in a margin squeeze for competitors in the downstream market, that are not allowed to effectively compete with the dominant undertaking, requiring them to increase the price, which in zero-price products can be represented by a lower quality, resulting in consumer harm.

Difficulties arise for tying and bundling as well. In fact, digital products often feature modularity or linkages with other products, which can come from demand side or supply side. When the current or potential consumers of different products overlap, a firm which is dominant over at least one product is incentivised to tie or bundle the products together, in order to leverage its market power in one market to foreclosure competition in another. However, linkages between products are quite common in digital markets and it can be difficult to identify tying and bundling, as both theories of harm require the existence of two different products. This creates doubts about new features or functions added to a digital product that may be considered as a new product bundled to the original one. Possible solutions are to consider if the new feature is offered on a standalone basis by other firms in the market and to interview or survey consumers in order to determine whether there is a demand for the standalone product in the absence of bundling[253]. It is also possible to consider if consumers would use the two possible products separately and if, based on their functionality, they are complementary, and to substitutable[254]. Moreover, tying and bundling can take new forms in digital markets, as it can be argued looking at insights into certain biases of consumers, which can be especially pronounced when they are using digital services. Consumers can in fact be nudged into purchasing certain products together, rather than being subject to ties implemented through contractual or technological limited methods, as limited compatibility could be[255]. A tendency of consumers to retain the default option, and for that default to affect their future decisions has also been identified, allowing strategies such as the pre-installation of a complementary product onto a system to have the same practical effects on a market as tying[256]. As the effect-based analysis requires to balance any potential impact on competition against businesses' justification and efficiencies generated, benefits generated for consumers must be considered, including easy-to-use standard interfaces, economies of scale and scope passed on them, reduction of prices[257].

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[253] KHAN, *Amazon's Antitrust Paradox* and HOLZWEBER, *Tying and bundling in the digital era*, in 14(3) *European Competition Law Journal* 342-366 (2018)

[254] AKMAN, *The Theory of Abuse in Google Search: A Positive and Normative Assessment Under EU Competition Law*, in 2 *Journal of Law, Technology and Policy* 301-374 (2017)

[255] HOLZWEBER, *Tying and bundling in the digital era*

[256] STEFFEL, WILLIAMS and POGACAR, *Ethically Deployed Defaults: Transparency and Consumer Protection Through Disclosure and Preference Articulation*, in 53(5) *Journal of Marketing Researc*h 865-880 (2016) [Online] Available at: https://journals.sagepub.com/doi/10.1509/jmr.14.0421 [Accessed 6 June 2022]

[257] OECD, *Abuse of Dominance in Digital Markets,* and CONDORELLI and PADILLA, *Harnessing Platform Envelopment Through Privacy Policy Tying*, 2020 [Online] Available at: https://dx.doi.org/10.2139/ssrn.3504025 [Accessed 6 June 2022]

The framework, as it has been shown, is not that simple. Its application can create many issues for competition authorities, which are split between overenforcement on one side, which can be a disincentive for the firms to invest in innovation, and underenforcement on the other side, which may result in harm to competition, competitors and consumers. Even though many instruments that can be used under the current regulatory regimen to help the assessment have been described, a more organic reform would surely help authorities, courts and undertakings, providing them with more solid rules designed to be applied to digital markets tailor-made to their peculiarities. This demand, as shown in the next chapter, is now receiving an answer from many legislators worldwide, leading to a more straightforward, precise and certain application of the abuse of dominant position in the digital markets' reality.

Chapter 2: A global perspective: the evolution of the abuse of dominance in digital markets around the world

In the previous chapter, it has been discussed what digital markets are, who are the players that operate in them, the distinctive characteristics shaping them and how the rules traditionally applied to abuses of dominant position need adaptations in order to respond to those peculiarities which differentiate the digital markets from the traditional ones. Some solutions that can help to solve those issues have been proposed as well. Those instruments can be directly used under the current European competition framework, within the limits of Article 102 TFEU, picked from those used by the European Commission and the European Courts in their analysis to better fit in the new context. However, a more structured response to the problems may be necessary in the form of tools specifically designed to interact with digital markets. In this regard, several regulators across the globe have filed drafts for regulatory reform of the sector. Even in countries where a legislative reform has not started, regulators and authorities have addressed the issue through other means, such as guidelines, which can offer a direction to follow in the assessment of conduct held in digital markets.
As such, the regulatory developments in some of the most relevant legal systems will be explored, comparing them to the present normative systems, to highlight the common direction undertaken in shaping the future of competition regulation of the abuse of dominant position in the digital markets and the possible consequences of those choices.

1 Europe: The Proposal for a Regulation on contestable and fair markets in the digital sector (Digital Market Act)

The European Union has been the first institution trying to bring forward reform of the regulatory framework regarding digital platforms. At the beginning of 2020, a legislative process was initiated to provide a new Regulation that could directly address the digital markets and their peculiarities. The Digital Market Act (DMA)[1] is still in the early stage of a proposal for a Regulation, but it already plays a fundamental role in setting the course of the future of European competition law. Some Member States' legislations, *e.g.* the German Act against Restraints of Competition[2], have already implemented the main innovative principle of the DMA. In the next paragraphs the Proposal will be analysed, pointing out its goals and the most important original principles and provisions.

[1]European Commission, *Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act)* 2020/0374 (COD), 2020. Hereinafter "DMA proposal". Version of the 11 May 2022.
[2] Germany, *Act against Restraints of Competition*, 2013, as last amended by Article 4 of the Act of 9 July 2021.

1.1 Establishing ex-ante rules for dominant digital platforms

The DMA represents the EU Commission's attempt to offer an *ex-ante* regulatory framework, seeking to ensure that a few online platforms, defined as "core platform services", do not engage in practices considered abusive, with the overarching aim of avoiding potentially harmful behaviours in digital markets. Said online platforms are those which have obtained a position of strength in their markets, bringing them to intermediate a significant portion of transactions between consumers and businesses[3]. According to the Commission, the choice of implementing an *ex-ante* approach is based on a few critical reasons. The first is the presence of that small number of platforms that dominate the digital economy as intermediaries between consumers and businesses, providing services and goods and displaying and exchanging information. The second is the acknowledgement that ex-post antitrust enforcement is not quick enough to address anticompetitive conduct by big digital platforms in the digital market. In fact, Article 102 TFEU does not enable an effective, pre-emptive intervention before harm is done, especially when markets are prone to tipping due to the existence of strong network effects, economies of scale and almost zero-price services and a difficulty of analysis increased by the structure of the market, which is often multi-sided [4]. While competition law mainly intervenes in an *ex-post* manner, addressing and sanctioning anticompetitive practices that have already taken place, the DMA tries to avoid such future anticompetitive behaviours: specific rules and oversight mechanisms try to ensure that digital markets remain contestable and fair, whenever these core-platforms services are present[5]. The DMA could be read as a highly simplified version of competition law to answer the need for speedy, effective and systematic enforcement. However, the DMA is more ambitious than that, since it seeks to create a regulatory environment in which great platforms can be contained and perhaps even reduced, striving to address perceived deficiencies or gaps in EU competition law as applied to digital markets controlled by those great platforms[6].

What should be understood is that Article 102 TFEU and the DMA have the same final aim for intervention, namely curbing undesirable behaviours exercised under conditions of market power. However, the DMA has been conceived as an additional and alternative instrument of competition policy that can offer fundamental

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[3] VAN CLEYNENBREUGEL, T*he Commission's digital services and markets act proposals: First step towards tougher and more directly enforced EU rules?*, in 28(5) *Maastricht Journal of European and Comparative Law* 667-686 (2021) and
European Commission, *Commission staff working document, Impact assessment report accompanying the document Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (digital markets act)*, 2020

[4] DIETRICH and VINJE, *The European Commission's proposal for a Digital Markets Act: In search of a 'golden standard' for appropriate ex ante regulation of large digital players*, in 2 *Computer Law Review International* 33-38 (2021)

[5] DMA proposal, Article 1(6)

[6] G. MONTI, *The Digital Markets Act – Institutional Design and Suggestions for Improvement*, in 4 *TILEC Discussion Paper* 3 (2021)

support in the specific context of the markets characterised by the presence of extremely significant and economically influential digital platforms. For those platforms, the DMA integrates the protection of Article 102 TFEU and in some specific circumstances replaces it by applying substantially different mechanisms and instruments. First of all, the consumer welfare test, which according to the more economical approach of the Court of Justice is a fundamental element to be considered in assessing if the conduct is abusive or not, is dismissed, as well as many methodologies applied under Article 102 TFEU. An *ex-ante* designation replaces the definition of a relevant market and the dominance inquiry, while a set of more or less precise rules of conduct binding on all gatekeepers in all settings replace the case-by-case interest balancing[7]. DMA Recital 10 dismisses the effects-based approach, meaning that the rules of conduct shall apply irrespective of a case-by-case analysis of the effects on competition. While it could seem strange that the DMA separates itself from some of the core elements of the Article 102 TFEU assessment, it should be noted that every one of those elements creates relevant problems because of the peculiarities of digital markets. As stated before, the traditional instruments used to evaluate consumer welfare cannot adapt very well to markets where services are offered at zero price and the interests are interconnected between different sides of the market, or between more relevant markets, and the trade-offs are difficult to settle. In the same way, the market definition and assessment of dominance under Article 102 TFEU can be particularly tricky in digital markets for the reasons expressed in the previous chapter. The assessment of dominance can require much time and resources, together with significant difficulty in obtaining relevant information.

The final goal of the EU Commission for the DMA is to ensure a high level of innovation, quality of service, user choice and competitive and fair pricing in the European digital economy[8]. To this end, three specific objectives are set: *(i)* ensuring contestability of digital markets, so that markets can remain open to new entrants and innovators; *(ii)* guaranteeing fairness in the relationship between the great digital platforms and their business users, which is defined as a balance between the rights and obligations of each party and the absence of an undue advantage in favour of the digital gatekeepers; and *(iii)* strengthening the internal market[9]. The legal basis for the DMA is indeed Article 114 TFEU, which ensures the functioning of the single market through the harmonisation of the rules at the EU level. The reason provided by the Commission for the choice of Article 114 TFEU, and not Article 103 TFEU, which provides the possibility of laying down appropriate regulations or directives to give effect to the principles set out in Articles 101 and 102 TFEU, is that digital services are essentially transnational. Thus, the DMA aims to limit regulatory fragmentation for digital services, particularly in relation to gatekeeper platforms, and to reduce compliance costs for companies

[7] SCHWEITZER, *The art to make gatekeeper positions contestable and the challenge to know what is fair: A discussion of the Digital Markets Act Proposal*, in 3 *ZEuP* (2021)
[8] DMA, recitals 25 and 79
[9] DE STREEL and LAROUCHE, *The European Digital Markets Act proposal: How to improve a regulatory revolution*, in 2 *Revue des Droits de la Concurrence* 46-62, 47 (2021)

operating in the internal market. As it will be explained later, the DMA is, for all intents and purposes, a part of the competition policy, but the choice of Article 114 TFEU as the legal basis is reflected in the goals the regulation is set to accomplish.

The first goal, contestability, tries to ensure that entry barriers to digital markets are low and that the playing field is levelled among existing core digital platforms and the other firms offering a substitute or complementary digital service[10]. What is protected here is the competition as a process and not the competitors themselves, so that the focus is switched from short-term effects (*i.e.* the current harms and efficiencies) to long-term consequences, such as innovation and long-term efficiencies. The second goal, fairness, is somewhat more complex, as it requires that the game rules set by core-platforms do not create imbalances for competitors and consumers. This concept seems to encompass both a procedural function, ensuring fair participation in core platform services, and a distributive function (*i.e. ex-post* fairness), which ensures a fair sharing of economic benefits in the value chain[11].

The third goal, strengthening the internal market, is realised through harmonisation. Indeed, harmonisation is essential to address effectively the most prominent digital platforms, which operate on a global scale and whose conducts impact most, if not all, Member States[12]. In order to achieve regulatory harmonisation, the DMA proposal forbids the Member States from imposing additional obligations on core platforms to ensure competitive and fair markets. At the same time, it permits them to impose obligations intending to pursue other legitimate interests, such as consumer protection, unfair competition, or obligations based on national competition laws, provided that doing so is permitted under EU competition law[13].

1.2 Gatekeepers

The central concept of the DMA concerns those great digital platforms, defined as "gatekeepers", which provide core-platform services and represent the subjects to which the DMA applies. It is possible to define a gatekeeper as *"an intermediary who essentially controls access to critical constituencies on either side of a platform that cannot be reached otherwise, and as a result can engage in conduct and impose rules that counterparties cannot avoid"*[14]. Once a digital platform is recognised as a gatekeeper, all the rules of the DMA immediately apply. If it engages in prohibited conduct, the Commission, which does not need to assess the

[10] Ibidem
[11] PETIT, *The Proposed Digital Markets Act (DMA): A Legal and Policy Review*, in 12(7) *Journal of European Competition Law & Practice* (2021)
[12] The proposal is based on Article 114 TFEU, which means that its main aim and purpose is to harmonise laws with a view to securing the internal market.
[13] DE STREEL and LAROUCHE, *The European Digital Markets Act proposal*
[14] CAFFARRA and MORTON, *The European Commission Digital Markets Act: A translation*, in *Vox.eu*, 2021 [Online] Available at: https://voxeu.org/article/european-commission-digital-markets-act-translation [Accessed 18 July 2022]

actual effects of the conduct anymore or to define the relevant market and assess the platform's dominance in it, can immediately address it. The threats to competition that the DMA is intended to address are connected to the unique market position that the most significant digital platforms occupy, a position of control over essential channels of distribution and over the relationship between buyers and sellers or advertisers to potential buyers[15].

The DMA provides several elements that need to be considered to designate a gatekeeper. As a preliminary rule, gatekeepers can be identified only among those digital platforms which offer one of the ten core platforms services listed under Article 2(2) DMA. Those services are *(a)* online intermediation services; *(b)* online search engines; *(c)* online social networking services; *(d)* video-sharing platform services; *(e)* number-independent interpersonal communication services; *(f)* operating systems; *(g)* web browsers; *(h)* virtual assistants; *(i)* cloud computing services and *(j)* advertising services (including any advertising networks, advertising exchanges and any other advertising intermediation services, provided by a provider where the undertaking to which it belongs is also a provider of online intermediation services and cloud computing services). It should be noted that while the core platform service providers that fall within the scope of the DMA are all providers of digital services, there are significant differences between them from a business model and technological standpoint. Therefore, the DMA is to apply to various entities, some of which have no competitive or commercial relationship, cutting across a range of markets and supply chains[16]. What unifies those providers are the common characteristics they share, which are those of any information society operator which has succeeded in the winner-take-all competition of digital markets, namely extreme economies of scale, powerful network effects, the ability to connect many business users with many end users through the multi-sidedness of these services, a significant dependence of both business users and end users, lock-in effects, a lack of multi-homing for the same purpose by end users, vertical integration, and data-driven advantages[17]. The Commission's concern derives from the combination of those features that may lead to severe imbalances in bargaining power and unfair practices and conditions for business users and consumers of core platform services provided by gatekeepers, to the detriment of prices, quality, choice and innovation[18]. However, as some of the listed features of a provider of core platform services are not unique to gatekeepers, other elements must be considered before the designation is done. In a way, core platform service providers are candidates for a gatekeeper position, but whether a gatekeeper position exists or not must be determined on the basis of Article 3 DMA.

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[15] FURMAN et al., *Unlocking digital competition: Report of the Digital Competition Expert Panel*, 2019 [Online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf [Accessed 19 July 2022]

[16] AKMAN, *Regulating competition in digital platform markets: a critical assessment of the framework and approach of the EU Digital Markets Act*, in 47(1) *European Law Review* 85 (2022)

[17] DMA Recital 2

[18] DMA Recital 4

Under Article 3 DMA, both qualitative and quantitative criteria are considered. Under Article 3(1) DMA, it is stated that an undertaking shall be designated as a gatekeeper "*if it has a significant impact on the internal market, if it provides a core platform service which serves as an important gateway for business users to reach end users and if it enjoys an entrenched and durable position in its operations or is foreseeable that it will enjoy such a position in the near future"*. The core platform services falling within the scope of the DMA are indeed only those: *(i)* where there is strong evidence of high concentration, meaning that usually one or very few large online platforms set the commercial conditions with considerable autonomy from their actual and potential challengers, customers or consumers; *(ii)* where there is a dependence on a few large online platforms acting as gateways for business users to reach and have interactions with their customers and *(iii)* where the power by core platform service providers may be misused employing unfair behaviour against economically dependent business users and customers[19].

The Commission's assessment, if solely based on qualitative criteria, would require evaluations not too dissimilar to the ones under Article 102 TFEU. To facilitate it, under Article 3(2) quantitative thresholds are identified as well. If exceeded, the quantitative criteria give rise to a rebuttable presumption for the qualitative criteria to be met.

The first qualitative criterion, having a significant impact on the internal market, is presumed *(i)* when the undertaking achieves an annual turnover, at the EU level, of at least 7.5 billion euros in each of the previous three financial years, or *(ii)* when the average market capitalisation or its equivalent fair market value amounted to at least 75 billion euros in the previous financial year and the undertaking provides the same core platform service in at least three Member States. This first possibility is pretty straightforward, but what may remain not completely clear is the three Member States' threshold present in the second option provided by Article 3(2) letter a). There is, however, no minimum threshold for the local nexus between the provision of services and the territory of an EU Member State. Therefore, in the abstract, it is possible to imagine a core platform service provider being extremely popular in one Member State but having almost no users in the other two Member States, still fulfilling the three EU Member State presence[20]. This uncertainty could easily be resolved introducing a minimum threshold for the provision of the services in each territory.

The second quantitative criterion, which underscores the necessity of controlling a gateway to reach consumers, looks at the users, requiring the core platform service to have at least 45 million monthly active end users established or located in the Union and at least 10 thousand yearly active business users established in the Union in the previous financial year.

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[19] GERADIN, *What is a digital gatekeeper? Which platforms should be captured by the EC proposal for a Digital Market Act?,* 2021 [Online] Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3788152 [Accessed 19 July 2022]

[20] DIETRICH and VINJE, *The European Commission's proposal for a Digital Markets Act*

However, the connection between the number of active monthly end or business users and the gateway position does not seem solid. To be accurate, this evaluation should not depend just on the abstract number of users but should consider whether there are other providers of the same core platform service that have a comparable, or at least a significant number of monthly active users as well[21]. The concept of being a gateway should presume that the provider of the core platform service is the only one being able to connect business users to end users, as the obligations imposed by the DMA on the provider should be justified by the absence of other actual competitors, in turn legitimizing the gatekeeper's burden to be held accountable for its conducts. It may be correct to conclude that the gateway requirement should not be considered as fulfilled, even if the quantitative threshold has been met, if there are other providers of the same service that offer end and business users a viable alternative, providing the service to a relevant amount of them, and if the business users cannot be considered dependent on the platform (*i.e.* a large proportion of their sales relies on the presence of the business user on the platform). In particular, this phenomenon may occur when users are keen on multi-homing, implying that many of them may rely on more than one parallel service simultaneously. However, this issue may find an adequate solution in the rebuttable nature of Article 3(2) letter b) presumption, which allows the assessed provider to demonstrate that it does not effectively control a gateway to consumers.

The last quantitative criterion, which makes up the presumption of having an entrenched and durable position in its operations, is assessed based on the thresholds under both Article 3(2) letter a) and letter b). The undertaking needs the two requirements in each of the previous three financial years. In reality, an entrenched and durable position stems from high barriers to entry, which in digital markets include network effects, economies of scale and scope, data-driven advantages and vertical integration. Therefore, the barriers to entry should be thoroughly examined when making a valid prediction for the near future, as they represent one of the few elements that can help to trace a trajectory forward.

The undertaking must fulfil the first step in the gatekeeping designation. In fact, under Article 3(3), the undertaking providing a core platform service that meets all the quantitative thresholds, has to notify the Commission thereof without delay, and in any case within two months after those thresholds are satisfied, providing the relevant information in that regard. If the undertaking fails to notify and to provide the information, the Commission is entitled to designate that undertaking as a gatekeeper based on its available information.

The downside of the quantitative criteria is that they are only based on the size of the provider or of the undertaking to which the provider belongs, and size is not directly linked to gatekeeper power[22]. In order to deal with the risk of over-inclusiveness, the DMA provides, under Article 3(4), a way out. The core platform

[21] GERADIN, *What is a digital gatekeeper,* 14
[22] DE STREEL and LAROUCHE, *The European Digital Markets Act proposal*

service provider satisfying all the quantitative thresholds can still avoid the gatekeeper designation. In order to do so, it must present sufficiently substantiated arguments to demonstrate that it does not satisfy the qualitative requirements, in consideration of the circumstances in which the relevant core platform service operates and of other elements, which are listed in Article 3(6) and that will be soon analysed. The Commission has to consider such arguments in more detail only if they manifestly call into question the presumptions. Thus, if the gatekeeper can present sufficiently substantiated arguments, the Commission has to perform a more extensive evaluation to prove that the qualitative criteria are met. In making this evaluation, the Commission shall consider some of all the elements listed under Article 3(6), insofar as relevant for the undertaking under consideration. It should be noted that the same criteria apply to include in the gatekeeper designation those core platform service providers that do not meet the quantitative thresholds set under Article 3(2), dealing in this way with under-enforcement. These criteria seem to recover some elements that could have been considered in the assessment of the dominant position of a platform in a relevant market under Article 102 TFEU[23]. The first element is "*the size, including turnover and market capitalisation, operations and position of the undertaking providing core platform services*", which seems to be redundant for all those providers that have met the quantitative threshold of Article 3(2) letter a). After that, the Commission should take into account "*the number of business users using the core platform service to reach end users and the number of end users"*. In the Commission's final draft, the concept of business users' dependency was stressed. As it has been stated before, the number of businesses or end users does not provide, per se, strong evidence of the gateway position the provider should control. In this direction, the second criterion seemed to recognize that what should be considered was the actual relationship existing between business users and the platform. Single homing, even if only on one side of the platform, can, for instance, create a dependency between the actors forced to turn to the dominant platform to reach the other side. The dependency assessment would have implied a study of the market to detect any competitor's presence. However, the reference to dependency has been eliminated from the draft, creating a potential *vulnus* for the undertakings and risk of over-inclusion.

The other criteria under Article 3(6) require the Commission to consider all those aspects that make digital markets, in reason of the business or services that are offered there, challenging to be contested. They are the previously described peculiar characteristics distinguishing digital markets from the traditional ones, such as network effects and data-driven advantages, the scale and scope effects, lock-in effects (including switching costs and behavioural bias reducing the ability of business users and end users to switch to multi-home) and the conglomerate corporate structure or vertical integration enabling operators to cross-subsidise. It could be

[23] FRANCK and PEITZ, Market Definition in the Platform Economy, in 23 *Cambridge Yearbook of European Legal Studies* 91-127 (2021)

said that those elements which can and should be considered under Article 3(6) do not make the work of the Commission much easier than in the proceeding under Article 102 TFEU. The presence of several common elements may reveal the proximity of the assessment under Article 3(6) DMA to the discipline of the abuse of dominant position in digital markets under Article 102 TFEU[24]. This similarity seems to be even more apparent in Article 15 DMA, which states that "*the Commission may conduct a market investigation for the purpose of examining whether a provider of core platform services should be designated as a gatekeeper pursuant to Article 3(6)*". However, the advantages provided by the DMA remain and should be highlighted, as they represent an answer to the problems of Article 102 TFEU analysis. Firstly, the assessment under Article 3(6) is only required when the provider has presented substantiated arguments to demonstrate that it does not meet the qualitative criteria or when the provider does not meet the quantitative criteria. In all the other cases, presumptions operate, requiring the Commission much less effort in designating a core platform service provider as a gatekeeper. Furthermore, Article 3(6) does not consider elements like price or market shares and does not require the Commission to make an evaluation that has to identify accurately the relevant market in the first place, which, as it has been explained, may become particularly difficult due to the two-sided or multi-sided nature of many digital platforms.

1.3 Gatekeepers' special responsibility

Once an undertaking providing one or more core platform services has been designated as a gatekeeper, a new and more pervasive responsibility falls on that subject. Articles 5 and 6 DMA establish a series of obligations gatekeepers must comply with. According to the Commission, these particular obligations were selected based on the experience gained, including that of the enforcement of the EU competition rules, which show that, given the characteristics of the digital sector, those conducts have a particularly negative direct impact on the business and end users, and therefore they should be considered unfair. It is not accidental that most of the rules of conduct can be linked to a recent competition law case, either at the European or at the Member State level[25]. It is possible to divide these obligations into a blacklist (Art. 5), comprising seven directly applicable detailed duties, and a grey list (Article 6), which instead comprises eleven less detailed obligations which may need to be specified by the Commission. Both lists present prohibitions and demanded conduct. While, in principle, all the provisions apply to each gatekeeper, some of those obligations are specific to particular core platform services[26]. Generally, the obligations and prohibitions under Articles 5 and 6 DMA deal with transparency, particularly in advertisement intermediation, envelopment through bundling or self-

[24] SCHWEITZER, *The art to make gatekeeper positions contestable and the challenge to know what is fair*
[25] CAFFARRA and MORTON, *The European Commission Digital Markets Act: A translation*
[26] DE STREEL and LAROUCHE, *The European Digital Markets Act proposal*

preferencing, denial of access to platforms and data, business and end users mobility and conducts that are considered *sensu stricto* unfair[27]. Considering the fast evolution of digital markets and the businesses that operate there, the decision to address specific conducts instead of establishing more principle-based provisions may create a few problems. However, the potential lacuna may still be filled through the application of Article 102 TFEU, which continues to apply to dominant undertakings' conduct.

Starting from the blacklist, under article 5(a), gatekeepers are prohibited from data-mixing without consent. The gatekeeper must also refrain from combining personal data sourced from the core platform service with personal data from other services of the gatekeeper or third parties. Additionally, they must refrain from signing in end-users to other services of the gatekeeper in order to combine personal data. These operations can be legitimate only if the end-user has been presented with the specific choice and provided meaningful consent in accordance with the GDPR (Regulation 679/2016). The Italian Competition Authority previously condemned this kind of practice under the consumer protection rules, sanctioning WhatsApp for having induced users to fully accept the changes made to the Terms of Use of WhatsApp Messenger, which contained a default opt-in option that allowed Facebook to use those data for commercial and advertising profiling[28]. What the AGCM could only assess as an unfair commercial practice will be judged under the DMA as a competition concern, if held by a gatekeeper. Leaving to a gatekeeper the possibility to combine data from many core platform services would in fact harm the contestability of the market, as few providers would be able to offer a similar service.

Under Article 5(b), gatekeepers must refrain from applying obligations that prevent business users from offering the same products or services to end-users through third-party online intermediation services, or through their own direct online sales channel, on different prices, terms and conditions than those offered through the online intermediation service of the gatekeeper. In 2017, Amazon had to make a commitment with the Commission, in which it agreed to eliminate some clauses that had been introduced in Amazon's e-book distribution agreements, referred to as "most-favoured-nation" clauses. Those clauses required publishers to offer Amazon similar or better terms and conditions as those offered to its competitors and to inform the intermediator about more favourable terms offered to Amazon's competitors[29]. In that case the Commission did not define the theory of harm of the alleged conduct, which probably would have led to impose an unfair trading condition.

Under Article 5(c), gatekeepers must allow business users to promote offers to end-users acquired via the core platform service and to conclude contracts with these end-users regardless of whether for that purpose they

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[27] Ibidem

[28] Autorità Garante della Concorrenza e del Mercato (AGCM), Decision of 11 May 2017, n. 26597, *Case PS10601 - Whatsapp-Trasferimento dati a Facebook*

[29] European Commission, *Press release: Antitrust: Commission accepts commitments from Amazon on e-books*, 2017 [Online] Available at: https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1223 [Accessed 20 July 2022]

use the core platform services of gatekeeper. On the other hand, end-users must be allowed to access content, subscriptions, features or other items by using the apps of a business user through the gatekeeper core platform service, even if these items have been acquired by the end users from the relevant business user through pther means. The first obligation consists in a prohibition of the anti-steering clause, which is a contractual obligation that tries to prevent traders form leaving the platform of the provider and using another intermediary. The Commission is currently assessing a similar case concerning Apple's policy, which required developers of music streaming apps, with whom Apple competes via its own music streaming service Apple Music, to use Apple's in-app purchase mechanism for the distribution of paid content within apps on iOS devices. Apple charges a commission fee to in-app purchases and restricts the ability to communicate with users to inform them about potential alternative cheaper subscription possibilities outside of the app[30]. It is interesting to note that the Commission, while preliminarily finding that Apple had a dominant position in the market for the distribution of music streaming apps through its App Store, states that Apple is "*a gatekeeper to users of iPhones and iPads via the App Store*". It seems that, even if the DMA is still only a proposal, its terms and concepts have already permeated the Commission's reasoning and that, as a result, the Commission is currently applying DMA rules, based on the gatekeeper designation, opening investigations in matters that would be difficult to pursue under Article 102 TFEU.

Under Article 5(d), gatekeepers are prohibited from restricting business users form raising issues related to gatekeeper practices with any relevant public authority, safeguarding those dependent business users' chance to enforce their rights from a potential undue influence of the gatekeepers. Even in this case, the DMA applies a principle of consumer protection legislation to gatekeepers. Indeed, the DMA seems to expand the application of Article 1(q) provision of the Directive 93/13/EEC Annex, which considers unfair a clause that excludes or hinders the consumer's right to take legal action or exercise any other legal remedy, to protect business users operating in digital markets. The position of strength of a gatekeeper could undoubtedly lead business users, who depend on the platform to reach end users, to accept avoiding enforcement against the gatekeeper not to incur in retaliation.

Article 5(e) prohibits gatekeepers from bundling their core platform services with identification services, requiring business users to use, offer or inter-operate with those identification services in the context of services offered on the platform.

Under Article 5(f), gatekeepers are not allowed to bundle several core platform services, prohibiting them from requiring business or end users to subscribe to or register with any further core platform services as a condition for being able to use, access, sign up for or registering with any of their core platform services. This

[30] European Commission, *Press release: Commission sends Statement of Objections to Apple on App Store rules for music streaming providers*, 2021

obligation is limited to the core platform services covered by a gatekeeper designation, and therefore a gatekeeper can still enter new markets[31]. Such bundling has been at the centre of the Commission's investigation in the Google Android case[32]. On that occasion the Commission concluded that tying Google Search app with the Play Store was providing Google with a significant competitive advantage that competing general search providers cannot offset by other methods of distributing general search services on smart mobile devices. With the DMA, this obligation will be extended beyond the providers of online search engines to include every other core platform service for which the gatekeeper designation has been performed.

Article 5(g) imposes gatekeepers to provide each publisher and advertiser to which it supplies digital advertising services, or third parties authorised by them, with information concerning the price and fees paid by the advertiser and publisher, the remuneration paid to the publisher and the measure on which each of the prices and remunerations is calculated. For cases where a publisher does not consent to share information, the gatekeeper will have to provide information concerning the average daily remuneration received for the relevant advertisement. The Commission has already opened an investigation regarding the lack of transparency of undertakings operating in the advertising sector[33].

The investigations are aimed at establishing whether Google is distorting competition by restricting access by third parties to user data for advertising purposes on websites and apps, while reserving such data for its own use, which may constitute a self-preferencing conduct.

Along with the general prohibition of the blacklist, the DMA addresses other conducts, which may need to be specified further by the Commission for each designed gatekeeper, considering the specificity of each gatekeeper that, as said before, may be involved in entirely different markets, driven by different balances and exigencies. These obligations include, among others, the prohibition to use, in competition with business users, any data not publicly available which are generated by business users or customers using the core platform service; the obligation to allow end-users to uninstall preinstalled apps on its core platform service; the obligation to allow the use of third-party apps and app stores using or inter-operating with the OS of the gatekeeper and to allow the side-loading, which is the possibility of accessing apps and app stores by means other than the gatekeeper core platform service; the prohibition of various form of self-preferencing, like ranking its own products and services more favourably than those offered by third-party competitors or imposing to business users and providers of ancillary services different conditions of access to and interoperability with the features used by the gatekeeper in providing ancillary services; the obligation of providing continuous and real-time portability of data generated through the activity of a business user or its

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[31] DE STREEL and LAROUCHE, *The European Digital Markets Act proposal*

[32] European Commission, Decision of 18 July 2018, *Case AT40099 – 'Google Android'*, par. 775

[33] European Commission, *Press release: Commission opens investigation into possible anticompetitive conduct by Google in the online advertising technology sector*, 2021 [Online] Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3143 [Accessed 20 July 2022]

end use and in particular to facilitate the exercise of data-portability for end users. All those conducts, just like the ones in the blacklist, are not new to competition authorities[34].

1.4 The relationship between the DMA principles and the enforcement of the abuse of dominant position under Article 102 TFEU

Realising that almost every obligation for gatekeepers under the DMA has already been or is being considered unlawful by competition authorities, or at least has already raised competition concerns, is important for two reasons. Firstly, it is evidence that such conducts can already be addressed and considered abusive under Article 102 TFEU. As it has been stated at the beginning, the DMA fits into the context of the abuse of dominant position and competition regulation, offering a simplified *ex-ante* process to assess specific conducts that are perceived as abusive but that may be difficult to pursue under the traditional rules. The prohibition and obligation under the DMA are in fact considered abusive *per se*, without the need to demonstrate the actual harm. They refer to subjects, the gatekeepers, which have a special responsibility that finds its justification in the role they play in digital markets and society, and not in a dominant position in a given relevant market. In this sense, the DMA acknowledges the characteristics of digital markets and identifies a framework that can overcome the applicative problems of Article 102 TFEU to persecute conducts deemed to harm consumers, competitors and ultimately competition itself. Secondly, the relationship between the DMA and the application of the abuse of dominant position in digital markets under Article 102 TFEU is a two-way one. Although it is undoubtedly true that the DMA rules were identified from existing cases under the attention of European competition authorities, investigations in the last few years have been opened because of the concepts and ideas of the DMA. As it happened in the Apple's App Store case, in which it was a way to avoid the complex relevant market definition for the sake of an immediate opening of the investigations, the gatekeeper concept is already widely used. For instance, the Italian Competition Authority used the term "gatekeeper" in its last annual relation on the performed activity[35]. Germany has already implemented the gatekeeper concept, referring to gatekeepers as companies of "*paramount significance for competition across markets*", into the Act against restriction of competition (ARC), the German competition law. In 2021, the German Competition Authority (Federal Cartel Office) immediately opened investigations on abuse of dominance regarding

[34] See as examples:
European Commission, Decision of 6 March 2013, *Case AT.39530 - Microsoft (Tying),* for the conduct of preinstall apps that could not be uninstalled;
AGCM, Decision of 30 November 2021, *Case A528 – Amazon FBA*, and European Commission, Decision of 27 June 2017, *Case AT.39740 – 'Google Search (Shopping)'* for self-preferencing conducts;
AGCM, Pr*ess conference: investigation opened against Google for abuse of dominant position in data portability*, *Case A552 – Google – Portabilità dei dati for the conduct of not favouring the exercise of the right of data portability of the users,* 2022

[35] AGCM, *Relazione annuale sull'attività svolta*, 2022 [Online] Available at: https://www.agcm.it/dotcmsdoc/relazioni-annuali/relazioneannuale2021/Relazione_annuale_2022.pdf [Accessed 20 July 2022]

conduct implemented by Meta, Amazon, Google and Apple[36]. In France, already in 2020, the French Competition Authority (Autorité de la Concurrence), while considering the current law framework applicable to digital platforms, suggested a definition for "*structuring platforms*" to broaden the definition of the dominant position. According to the FCA, a structuring platform can be defined based on a lasting and dominant position in the market and its neighbouring markets, which causes the platform to be unavoidable. For this reason, the structuring platform needs to have a significant number of users, to be integrated into an ecosystem, to benefit from the leverage effects, and consequently to have access to data in immense quality and quantity and have a sizeable financial capacity[37]. This definition echoes the DMA provisions and explains how the FCA has already implemented the gatekeeper concept in its practice.

The path has been similar in the UK, where the competition rules are still based on the EU framework. In 2020, the Competition and Market Authority carried out a market study on online platforms, in which it recognised that platforms have a crucial gatekeeper function in the digital economy due to their role as mediators between consumers and businesses. Consequently, it stated that there was a compelling case for the development of an *ex-ante* regulatory regime to regulate the activities of digital platforms, in particular those funded by digital advertising[38]. The CMA argued that the current laws and enforcement regimes were not tailored to the fast-moving digital markets and that regulatory reform would have had pro-competitive effects benefitting consumers, promoting competition by overcoming barriers to entry and expansion, protecting competition and consumers where online platforms have market power from the gatekeeping position they hold, by controlling their behaviour in order to ensure they did not engage in exploitative or exclusionary practices, or practices likely to reduce trust and transparency.

What can be deduced from this analysis is that the DMA is, first, an answer to the perceived problems created by the presence of strong platforms in digital markets and to the limits of the traditional rules of the abuse of dominant position under Article 102 TFEU, as they have been explained in the previous chapter. The DMA was founded on the actions of the enforcement just as much as the enforcers acted based on the DMA concepts, despite continuing to operate using the old, not totally adapted, instruments and mechanisms, which made the authorities' task much more complex and less consistent with the traditional pattern of abuse of dominant position.

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[36] Bundeskartellamt, *Press release: Review of 2021*, 2021 [Online] Available at: https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Pressemitteilungen/2021/22_12_2021_Jahresrueckblick.pdf?__blob=publicationFile&v=2 [Accessed 21 July 2022]

[37] BRAMIN, *The information report on digital platforms written by French MP's*, in *Competition Forum – French Insights* n. 0022, 2022 [Online] Available at: https://competition-forum.com/the-information-report-on-digital-platforms-written-by-french-mps/ [Accessed 21 July 2022]

[38] Competition and Market Authority, *Market study final report: Online platforms and digital advertising*, 2020

2 United States of America: a time for reforms

The US approach to competition regulation, and particularly in assessing the unilateral conduct of dominant economic operators, has always differed somewhat from the European one. Therefore,
before analysing the Sherman Act and the way it has been interpreted in the last forty years, it is necessary to make a preliminary clarification. The US antitrust law, which only punishes monopolisation or attempted monopolisation, does not recognise the legal concept of abuse of dominant position, as it is known under the European competition rules. This difference, which will be explained soon, has several consequences in enforcing abusive conduct held by an economic operator with a significant market strength in general, and even more for the operators of digital markets.

2.1 Sherman Act and the Chicago School of Antitrust economics

The Sherman Act, adopted in 1890, was the first legislation enacted by the US Congress that offered the federal government the opportunity to deal with contracts, mergers and agreements in restraint of trade, monopolies and attempts to monopolise[39]. Sherman Act section 2, which prohibits individuals and business entities from monopolisation and attempts to monopolise, does not specify what is implied under the term market monopolisation. The absence of specific rules meant the courts had the role of interpreting this prohibition and building a practice in the monopolisation's application standard[40]. Monopolisation, just as the dominance in the European context, is not unlawful *per se*, but it is its abuse that is prohibited, meaning that only certain behaviours of economic operators acquiring or attempting to acquire a monopoly position are going to be punished. Monopolisation makes up a higher standard compared to the abuse of dominant position, meaning that monopolistic conducts prohibited under Sherman Act section 2 are likely to constitute an abuse of dominance under Article 102 TFEU and not *vice versa*[41]. The definition of monopoly power is strictly economic, comprising the power of raising prices profitably, and it will require holding two thirds of the market or, in exceptional cases, at least 50% of the market shares[42]. The Courts' practice has considerably reduced the number of conducts considered unlawful compared to the EU practice. The only acts covered by Section 2 are the exclusionary ones, among them only those that increase market power and harm consumers,

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[39] KALES, *The Sherman Act*, in 31(3) *Harvard Law Review* 412-446 (1918)
[40] RAKIC, *Monopolization Standards in US Competition Law: Evolution and Evaluation*, in 4 *Anali Pravnog fakulteta u Bogradu* 98-110 (2020) [Online] Available at: https://ssrn.com/abstract=3755802 [Accessed 24 July 2022]
[41] FOX, *Monopolization and abuse of dominance: why Europe is different*, in 59(1) *The Antitrust Bulletin* 129-152 (2014)
[42] LANDES and POSNER, *Market power in antitrust cases*, in 94(5) *HLR* 937-996, 982 (1981), and US Supreme Court, Judgment of 25 January 1993, *Case 'NSpectrum Sports, Inc v. McQuillan'*, 506 U.S. 447, in which the Supreme Court held that companies with lower market shares can still fall in the prohibition of Section 2 for attempting to monopolise the market, if their conduct is clearly anticompetitive and does not have business justification and will likely result in a monopoly if continued.

which usually result in higher prices and lower inputs[43]. The US Supreme Court rarely considers monopoly offences as particularly dangerous and stated several times that a business, when it acts unilaterally and not in the context of a cartel, almost always acts in the interests of consumers and that unilateral exclusionary acts against consumer interests are sporadic, while antitrust intervention would only undercut successful firms' incentives to invest in innovation, protecting inefficient rivals from stiff competition[44].

This concept was expressed for the first time in Standard Oil v United States[45], in which the Court held that Section 2 of the Sherman Act prohibits only unreasonable restraint of trade, conducive to creating monopolies. The conclusion formulated by the Supreme Court is known as the "theory of abuse"[46]. According to this theory, it is case of monopolisation when the business acts upon the intent to exclude competitors, with no credible efficiency justifications that could otherwise explain that conduct[47]. Subsequently, the standard changed, eliminating the necessity to prove the specific intent to monopolise in each case, which was substituted by an assessment of the balance of procompetitive and anticompetitive effects of the conduct, as "*no monopolist monopolises unconscious of what he is doing*"[48]. Therefore, conduct will never be abusive *per se*, but it will be abusive only when the effects of distorted competition outweigh the consumer benefit and efficiency gains[49]. The goal of US competition policy is indeed relatively narrow, as it only tries to preserve consumer welfare in the interest of efficiency, so unless the alleged conduct is going to reduce output across the market and increase the prices, the market should be left free from interference[50]. The focus is totally on efficiency, which is considered to incentivise innovation and to provide the best price production and delivery of products and services wanted by consumers, while there is no interest in the distributional results, as incorporating distributional concern is thought to reduce the total output, making everyone worse off[51]. In contrast with the European approach, monopolists do not have that same special responsibility not to allow their conduct to impair genuine, undistorted competition on the common market.[52] Under the current Sherman Act interpretation, monopolists are allowed to exploit their monopoly position and exercise monopoly power in their relationship with the consumers. Only the acquisition or maintenance of a monopoly is controlled unless the global effect is not detrimental to efficiency.[53]

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[43] FOX, *The Decline, Fall and Renewal of U.S. Leadership in Antitrust Law and Policy*, in *Competition Policy International Antitrust Chronicles* (2022)
[44] FOX, *The Decline, Fall and Renewal of U.S. Leadership in Antitrust Law and Policy*
[45] Supreme Court of the Unites States, Judgment of 15 May 1911, *Case 'Standard Oil Co. New Jersey v. United States'* 221 U.S. 1
[46] HYLTON, *Antitrust Law and Economics*
[47] HYLTON, *Antitrust Law: Economic Theory and Common Law Evolution*
[48] United States Court of Appeals for the Second Circuit (1945) United States v. Aluminium Corporation of America, 148 F.2d 416
[49] RAKIC, *Monopolization Standards in US Competition Law*
[50] FOX, *The Decline, Fall and Renewal of U.S. Leadership in Antitrust Law and Policy*
[51] Ibidem
[52] Court of Justice of the EU, Judgment of 9 November 1983, *Case C-322/81, 'NV Nederlandsche Banden Industries Michelin v Commission of the European Communities',* ECLI:EU:C:1983:313, par. 57
[53] SCHWEITZER, *The History, Interpretation and Underlying Principles of Section 2 Sherman Act and Article 82 EC*, in EHLERMANN and MARQUIS, *European Competition Law Annual 2007: A Reformed Approach to Article 82 EC*

The US Courts' approach towards monopolisation is the direct application of the theories of the school which has dominated the antitrust legal thinking in the last fifty years in the US, the Chicago School of antitrust economics[54]. The Chicago School originated in the 1950s when Aaron Director formulated the key ideas, later elaborated by students and colleagues, showing a solid commitment to libertarianism and non-intervention.[55] The basic tenet on which the conclusions were based is that problems of competition and monopoly should be anlaysed through the tools of general economic theory. Thus, the Chicago School concludes that firms are by and large unable to get or enhance monopoly power by unilateral action unless they are irrationally willing to trade profits for position, which is the only case when, if ever, a firm can unliterally obtain or maintain monopoly power[56]. Following the neoclassic economic theory, the Chicago School argues that markets are inherently self-correcting and, if left alone, they will autonomously solve any problem. For instance, monopolies and their conduct do not deserve particular scrutiny because monopoly attracts disruptive entries from other competitors, which will try to obtain part of the wealth generated by the market[57]. Therefore, government intervention as antitrust enforcement is not regarded as needed in order to deliver competitive markets[58]. If conduct cannot be proven anticompetitive, the correct answer for the Chicago School is no enforcement[59]. Through the lens of neoclassical economics, which considers people doing business as rational profit-maximisers, those unilateral conducts deemed abusive under Article 102 TFEU were not regarded as viable methods to increase monopoly power. For example, according to these theories, tying is not a rational method of exploiting monopoly power in order to get more profits, as an increase in the price charged for the tied product would reduce the price that purchasers are willing to pay for the tying product. Instead, tying is a device used to serve additional consumers[60]. As such, almost every unilateral conduct should be considered legal, because it cannot harm consumer welfare in the interest of efficiency. These conclusions can also be explained by looking at the different definitions for barriers to entry that were accepted by the Chicago School and by the Harvard School. Unlike the Chicago School, the latter represents a more moderate way of thinking that, while denying the identification of *per se* rules in order to prohibit certain conducts, does not go so far as to consider all those unilateral practices by monopolists as *per se* legal[61]. Moreover, according to the Harvard School, barriers to entry include each market factor that blocks entry from potential competitors, while yet permitting the firms that are already into the market to charge above price costs. This is significantly different

[54] DIRECTOR and LEVI, *Law and the Future: Trade Regulation*, in 51 *Northwestern University Law Review* 281-296 (1956)
[55] HOVENKAMP and MORTON, *Framing the Chicago school of antitrust analysis*, in 168(7) *University of Pennsylvania Law Review* 1843-1878 (2020)
[56] POSNER, *The Chicago School of Antitrust Analysis*, in 127(4) *University of Pennsylvania Law Review* 925-948 (1979)
[57] HOVENKAMP and MORTON, *Framing the Chicago school of antitrust analysis*
[58] EASTERBROOK, *The Limits of Antitrust*, in 63(1) *Texas Law Review* 1-40 (1984)
[59] HOVENKAMP and MORTON, *Framing the Chicago school of antitrust analysis*
[60] POSNER, *The Chicago School of Antitrust Analysis*
[61] ELHAUGE, *Harvard, Not Chicago: Which Antitrust School Drives Recent Supreme Court Decisions*, in 3(2) *Competition Policy International* 59-77 (2007)

from the Chicago School, which states that barriers to entry are limited to a cost of producing which must be borne by a firm seeking to enter a market, but it is not borne by firms already operating in that market[62]. It is then possible to imagine the impact of the Chicago School definition when assessing conduct held in digital markets, where network effects, economies of scale and the possession of a large amount of data are so crucial to a correct evaluation of the possibility of new competitors entering the market. In the United States v. Microsoft case, the Court observed that, even where network effects could lead to a form of entrenchment for users, such entrenchment was ultimately fleeting owing to rapid creative destruction cycles that transform the market directly[63].

The US, following these theories in the period regarded as the age of liberalism (1980s-present), allowed the significant expansion of firms and the increase of market concentration, which was considered to produce efficiencies, like economies of scale, without detriment to competition, instead providing more room for innovation and growth[64]. Despite acquiring new instruments, like game theory, the focus of the US antitrust reasoning is still strictly connected to the general and consumer welfare impacts of the conduct, which is estimated, albeit imperfectly, through strong formal economic reasoning[65]. The almost total absence of intervention toward exploitative practice, together with the consolidated restrictive interpretation of monopolisation and of the Sherman Act section 2 goals and the requirement of finding conduct to be abusive based on an economic theory and on the overall effect to the benefit of consumers, result in a meagre rate of enforcement of conduct held by dominant business in the US, compared to Europe, with a preference for the non-intervention solution unless there is clear evidence of market foreclosure or consumer harm. The activity in digital markets seems to be affected by the same disbelief in the role that enforcers' decisions and remedies may play in curbing potential abuses of market power and by the concern on the dangers of chilling business competition and innovation in the markets.

2.2 Changing direction through legislative reform (i.e. the Antitrust legislative proposal)

Despite a significantly different competition policy framework compared to the European one, even in the US the inadequateness of traditional antitrust rules in the digital markets has started to be called into question[66]. A new movement, regarded as "New-Brandesian", shifts the focus from consumer welfare to the size of the

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[62] BAIN, *Barriers to New Competition 2nd Edition*
STIGLER, *Monopolistic Competition in Retrospec*t, 1968, in STIGLER, *The Organization of the Industry*, Chicago, Chicago University Press, 1983
[63] United States Court of Appeals, District of Columbia Circuit, Judgment of 28 June 2001, *Case 'United States v. Microsoft Corp.'*, 253 F.3d 34, 52
[64] RAKIC, *Monopolization Standards in US Competition Law*
[65] LANCIERI, *Digital Protectionsm? Antitrust, data protection, and the EU/US transatlantic rift*, in 7(1) *Journal of Antitrust Enforcement* 27-53 (2019)
[66] WRIGHT and PORTUESE, *Antitrust Populism: Towards a Taxonomy*, in 21(1) *J.L. Bus. & Fin.* 131 (2020)

so-called big digital operators, which are responsible for the accumulation of power in a handful of firms. This paradigmatic change allows those few operators to dominate most markets in the country, both economically and politically, causing harm to users, competition and weakening democracy[67]. According to this movement, the consumer welfare standard would focus too narrowly on economic efficiency, thus failing to account for many harms, including entrenching monopolists, and should therefore be replaced by a standard that focuses on containing corporate power[68].

In July 2021, the White House issued an 'Executive Order on Promoting Competition in the American Economy', which requires several government agencies to adopt rules and regulations to accomplish the competition-enhancing goals established in the Order, concerning potential issues regarding the assumed increase in market consolidation and abuse of market power[69]. The Order represents only one of the many initiatives currently in progress in the US intending to address the conduct of the dominant businesses in digital markets more effectively. All the legislative reforms are still in a preparatory stage, but if the proposed bills are passed and implemented, they might drastically alter the situation for digital platform providers and the antitrust enforcement landscape in the US[70]. The legislative reform proposals encompass every aspect of competition policy. However, they mainly focus on mergers and unilateral abusive conduct (the less enforced categories until now), that, given the new direction of thought, cause concerns for the US legislator.

Out of the several proposed Bills, three directly regard the theme of monopolisation and attempt to monopolise, with different degrees of innovation and approximation to the European model.

The most ambitious proposal, which would represent a complete overhaul of the US antitrust policy, is the Competition and Antitrust Law Reform Act[71]. The Bill's reasoning stresses that competition and effective enforcement are critical to protect consumers, foster innovation and promote economic equity[72]. In particular, it was recognised that anticompetitive exclusionary conduct constitutes a particularly harmful exercise of market power and that the exercise of market power by a dominant subject can give rise to issues, irrespective of that subject's role. In fact, if dominant sellers can harm buyers by overcharging them, reducing product or service quality and limiting consumer choices while impairing innovation, dominant buyers as well can harm suppliers by underpaying them and limiting their business opportunities[73]. It is important to note the use of the term "dominant" and not only the term "monopoly", as it may represent an attempt to widen the base of those

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[67] WU (2018) *The Curse of Bigness: Antitrust in the New Gilded Age*
[68] Ibidem
[69] White House, Executive Order on Promoting Competition in the American Economy, 2021 [Online] Available at https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/ [Accessed 26 July 2022]
[70] ANTEL et al., *Effective Competition in Digital Platform Markets: Legislative and Enforcement Trends in the EU and the US,* in 6(1) *European Competition and Regulatory Law Review* 6 35-55 (2022)
[71] US Congress, *Proposed Bill S.225 - Competition and Antirust Law Enforcement Reform Act of 2021*, 2021
[72] ANTEL et al., *Effective Competition in Digital Platform Markets*
[73] *Competition and Antirust Law Enforcement Reform Act of 2021*, Section 2

affected by the obligations. The underlying assumption is that antitrust enforcement against anticompetitive exclusionary conduct has been impeded by the courts' established approach, which has declined to examine rigorously the facts relying on economic assumptions that are inconsistent with contemporary economic learning, such as presuming that market power is not durable and can be expected to self-correct, that monopolies can drive as much or more innovation than a competitive market, that above-cost pricing cannot harm competition, and other flawed assumptions[74]. It seems that the Chicago School assumptions are being refuted in favour of a more interventionist approach toward the unilateral conduct of dominant operators. Section 9 lays down specific rules for exclusionary conducts, which are defined as conducts that can materially disadvantage one or more competitors or limit the ability or incentive of potential competitors to compete. It is established that it shall be unlawful for a person, even if acting alone, to engage in exclusionary conduct that presents an appreciable risk of harming competition. That risk should be presumed if an operator with a market share of over 50% undertakes the conduct as a seller or buyer in the relevant market or if it otherwise has significant market power in the relevant market, which, however, is not specified. Under the Competition and Antitrust Law Reform Act, a business operator in search of protection can prove that the distinct procompetitive benefits of the exclusionary conduct in the relevant market eliminate the risk of harming competition or that the exclusionary conduct does not present an appreciable risk of harming competition. Thus, the objective justification would switch from a general efficiency assessment to specific considerations focused on the effects of the conduct on competition. Section 9 letter e) outlines specific circumstances which may constitute evidence of abuse, but that are not necessary for the violation to be found. It includes *(i)* the alteration or termination of a prior course of dealing; *(ii)* differentiated treatment; *(iii)* price below cost; *(iv)* the fact that the business operator with significant market power has recouped or is likely to recoup the losses it incurred from below-cost pricing; *(v)* the absence of economic sense of the conduct apart from its tendency to harm competition; *(vi)* the quantification or presence of quantitative evidence of the harm to competition; *(vii)* the fact that when there is a multi-sided platform business, the conduct presents an appreciable risk of harming competition on more than one side. The need to provide a market definition is eliminated unless the statutory language explicitly requires so, but it is not explained which kind of evaluation should replace the assessment of dominance, or monopoly power, in the relevant market. Thus, even if none of these elements seems particularly innovative, they would still represent an evolution and improvement toward more pervasive enforcement of abuses from dominant business operators.

Other Bills are more focused on particular themes and address the digital markets more profusely.

[74] *Competition and Antirust Law Enforcement Reform Act of 2021*, Section 2

The American Innovation and Choice Online Act[75] has the aim of restoring competition online by establishing commonsense rules of the road for dominant digital platforms to prevent them from abusing their market power to harm competition, online businesses, and consumers. The Act adapts the legislation to ensure that the companies operating in digital markets compete fairly, echoing the DMA framework in more than one aspect[76]. First of all, the rules would apply to "covered platforms", which are online platforms that have been designated for a period of seven years under a procedure on the basis of the fulfilment of specific qualitative and quantitative thresholds.

As for the first possibility, the platform needs to be owned or controlled by a person who is a publicly traded company. It is then required to reach a threshold for the number of monthly active users. The platform must have had, at any point during the twelve months preceding the designation,or the filing of a complaint for an alleged violation, 50 million US-based monthly active users on the online platform, or 100 thousand US-based monthly active business users on the online platform. In addition, in the two years preceding the designation or the filing of a complaint, the platform has been owned or controlled by a person with US net annual sales of greater than $550 billion or with an average market capitalisation greater than $550 billion during any 180-day period during the two years or has had at least one billion of worldwide monthly active user on the online platforms in the year preceding a designation or the filing of a complaint.

A second possibility addresses the case in which the platform is owned or controlled by a person who is not a publicly traded company. In this scenario, the quantitative thresholds regarding the monthly active users are the same. However, it is required of that person owning or controlling the platform to have had, during the two previous years, earnings, before interests, taxes, depreciation and amortisation, of greater than $30 billion or have had on the platform one billion worldwide monthly active users. The person owning or controlling the platform also needs to be a critical trading partner for the sale of provisions of any product or service offered on or directly related to the online platform. A critical trading partner is defined under Section 2, letter a) n.6 as a person who can restrict or materially impede the access of a business user to the users or customers of the business user or to a tool or service that the business user needs to serve the users or customers effectively. It is possible to notice that, except for the monthly active users required, all the other thresholds are much higher (*i.e.* almost ten times higher) than those set in the DMA. This difference may be partly explained thanks to the difference between the US and EU market dimensions and may lead to an even smaller number of platforms being subject to the rules of this framework. Just as in the DMA, a series of conducts are prohibited to the covered platforms, including the self-preferencing, with the obligation to respect a standard of neutral, fair and

[75] US Congress, *Proposed Bill S.2992 – American Innovation and Choice Online Act*, 2021
[76] KLOBUCHAR, *Press-release: Klobuchar, Grassley, Colleagues to Introduce Bipartisan Legislation to Rein in Big Tech*, 2021 [Online] Available at: https://www.klobuchar.senate.gov/public/index.cfm/news-releases?ID=3AD365BE-A67E-40BB-908A-C8570FF29600 [Accessed 26 July 2022]

nondiscriminatory treatment of all business users; the limitation of the ability of competitors to compete on the platform; the discrimination in application or enforcement of the terms of service among similarly situated business users; the material restriction, impediment or unreasonable delay in the capacity of a business user to access or inter-operate with the same platform, operating system or software feature that is available for the covered platform operator. It is also prohibited to apply better conditions on the platform on the purchase of products or services of the same platform that are unnecessary to operate there; to use nonpublic data that the covered platform can get from the activities of the business users on the platform in order to make its own products or services better; to restrict or impede a business user from accessing data generated on the covered platform by its own activities or through the interaction of its services with the platform. Finally, retaliation against any business or end user that raises concerns with any law enforcement authority about actual or potential violations of State or Federal law is prohibited. As said, the framework presented seems to show many similarities with the DMA and would represent a complete game-changer for the US competition policy, creating an apparent rupture with previous tradition, limited to the area of digital platforms. For the first time, not only monopolies but also exploitative abusive dominant platforms would be persecuted, through an *ex-ante* mechanism founded on the "covered platform" designation, in the same way as the DMA mechanism is founded on the "gatekeeper" designation. This approach reflects a growing consensus on both sides of the Atlantic that some tech firms have abused their allegedly dominant market positions to the detriment of consumers[77].

Differently from the DMA, however, the covered platform can present defenses for its conduct. In order do so, it must establish by a preponderance of the evidence that the conduct was narrowly tailored, non-pretextual, and reasonably necessary to prevent a violation of, or comply with, Federal or State law. Alternatively, the conduct must be implemented to protect safety, user privacy, the security of nonpublic data, or the security of the covered platform or to maintain or substantially enhance the core functionality of the covered platform. For the prohibited conduct, except for self-preferencing, the limitation of competition with the products or services of the platform and the discrimination in the application of policy terms, the covered platform can prove as well that the conduct held has not and would not result in material harm to competition, freeing itself from any penalty.

The third proposed Bill is the Ending Platform Monopolies Act[78], which tries to address any unfair competitive advantages that may rise when the same company both controls access to a marketplace and simultaneously competes in it[79]. Therefore, the main purpose of the act is to impede big digital platforms from leveraging their

[77] ANTEL et al., *Effective Competition in Digital Platform Markets*
[78] US Congress, *Proposed Bill H.R.3825 – Ending Platform Monopolies Act,* 2021
[79] CHIN, *Breaking Down the Arguments for and against U.S. Antitrust Legislation*, in *Center for Strategic and International Studies* (2022)

market power against other services that compete on that same platform. The proposal is based on the assumption that a prohibition of self-preferencing is not enough to stop these competitive advantages, and therefore, the vertical ownership of multiple business lines should be separated to prevent the abuse of market position[80]. Therefore, it would be forbidden for covered platforms to own, control, or have a beneficial interest in a line of business other than the covered platform that utilises the covered platform for the sale or provision of products or services. For the same reason, covered platforms are restrained from offering a product or service requiring a business user to purchase or utilize *(i)* as a condition for access to the same platform or *(ii)* as a condition for preferred status or placement of product or services on the covered platform or *(iii)* if in general, it gives rise to a conflict of interest. The last condition exists whenever the covered platform, owning or controlling a line of business, has an incentive to advantage its products or services or to exclude or disadvantage competitors' products or services.

This Bill does not deal directly with the unilateral abuse from the dominant operators of the digital markets. Yet, it is likely to have a relevant impact on their business models and on their ability to implement abusive conduct or to be dominant in the first place, affecting the vertically integrated structure of most digital platforms. It should be noted that it is not clear whether structural or functional separation is the best tool to deal with a market concentration in digital markets since, even if the separation may favour competition in the short term, it may be challenging to preserve the incentive and ability of platforms to innovate, while protecting rivals from the consequences of that innovation[81].

To conclude, all these legislative reform proposals seem to have a common goal: to provide greater competition enforcement against dominant business operators of the digital markets and their unilateral conducts. This approach contrasts with the legal tradition founded on the Chicago School of antitrust economics theories. If implemented, the Bills would create a convergence towards the EU approach regarding the abuse of dominance of digital platforms, shaping a more homogeneous framework to assess the conduct of the global tech giants operating on the digital markets.

[80] CHIN, *Breaking Down the Arguments for and against U.S. Antitrust Legislation*
[81] GILBERT, *Separation: A Cure for Abuse of Platform Dominance?,* in 54(2) *Information Economics and Policy* (2021)

3 China: a new approach toward digital markets

Even outside the Western liberal legal tradition, the approach towards unilateral conduct of digital markets players is converging. In China, despite the socialist market economy, competition enforcement is becoming more significant and, in particular in the digital sector, a reality that cannot be ignored.

China has the second largest digital platform industry in the world, second only to the United States, with players like Tencent, Alibaba and Meituan[82]. The platforms play an essential role in the daily lives of Chinese people, despite Chinese platform companies not being at the same level as their US counterparts in terms of the economic scale, information technology and, especially, international reach[83]. In recent years, after an initial period of laissez-faire policy toward digital platforms, tables are turning. Differently from what is happening with the EU DMA and from the US legislative reform process, China has decided to address the issues raised by digital markets through the Antitrust Guidelines on Digital Economy (2021), which try to adapt the current competition rules to the new reality, updating some of the traditional mechanisms and introducing new instruments for the assessment.

3.1 The Antitrust Monopoly Law (2007)

In China, competition law has closely followed the evolution of the markets. In 1980 the first Provisional Rules on the Development and Protection of Socialist Competition[84] were adopted, acknowledging the development of competition in the wake of the market reform, but they specified that competition in socialist economies ought to be carried out under the guidance of the state plan based on the public ownership. Simultaneously, competition was promoted to ensure all production and business units would complete the national production and marketing plan, improve product quality, management, labour efficiency and reduce cost[85]. Since the early 1990s, several laws and administrative regulations aimed at preventing anti-competitive practices were implemented, dispersing competition-related provisions over nearly 40 legislative measures[86]. In 2007, after thirteen years of discussion, the Anti-Monopoly Law of the People's Republic of China (AML) was promulgated, adopting a formulation that was quite close to the European Competition Law, being articulated into three main chapters dealing with monopolistic agreements, abuse of dominant position and

[82] WANG, *Platform antitrust in China*, in 15(2) *China Economic Journal* 171-186 (2022)
[83] Ibidem
[84] Chinese State Council, *Guanyu Kaizhan He Baohu Shehui Zhuyi Jingzhenz De Zanxing Guiding* [Provisional Rules on the Development and Protection of Socialist Competition], 1980
[85] MA, *Competition Law in China: A Law and Economics Perspective*, 12
[86] DABBAH, *The Development of Sound Competition Law and Policy in China: An (Im)possible Dream?,* in 30(2) *World Competition: Law and Economics Review* 341-363 (2007)

concentrations[87]. The legislative process of the AML coincided with the market reform in China, which aimed to establish a market economy[88]. This explains why the AML, alongside establishing the legal foundation for competitive markets in China, is set to fulfil several social goals, such as safeguarding the interests of consumers and public social interest and promoting the healthy development of the socialist market economy.[89] The Chinese market economy, however, is still pretty different from the Western liberal economies, as the State-owned enterprises (SOEs) still play a vital role in the national economy. The SOEs embody many interests of different sectors and administrative departments; thus, under Article 51 AML, enforcement agencies only have the power to make suggestions and submit professional opinions to superior authorities regarding administrative monopolies[90]. Enforcement agencies lack the power to impose financial penalties on the SOEs, and the lawful operation conducted by industries controlled by a SOE is protected by the law. As a result, under the AML, little can be done in order to break the market power of SOE-controlled business operators who abuse their dominant position.

Apart from the SOEs, the AML tries to offer a practical and complete competition protection framework and a legal basis for prosecuting the abuses of dominant position by business operators.

According to the AML definition of dominant market position, a business operator is dominant if it can control the price, quantity or other trading conditions of products in a relevant market or hinder or affect any other business operator that wants to enter the market.

Under Article 18 AML, the factors that must be considered in determining the dominant market status are listed. These are not particularly dissimilar to those assessed under Article 102 TFEU, as they include *(i)* the market share of the business operator in the relevant market, together with *(ii)* the competition situation in that relevant market, in order to understand if there are any effective competitors; *(iii)* the financial and technical conditions of the business operator; *(iv)* the capacity of the business operator to control the sales markets or the raw material procurement market, which is useful to understand if there is a possible demand or supply substitutability; *(v)* barriers to entry; *(vi)* the degree of dependence of other business operators upon the business operator which is being analysed in transactions. The main factor of the assessment, just like under Article 102 TFEU, is indeed the market share of the business operator, as it is confirmed by Article 19 AML, which provides a presumption of dominance for the business operator holding a market share of 50% in the relevant market. The same presumption applies if the joint relevant market share of two business operators accounts for two-thirds or above or if three business operators account for three quarters or above of the

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[87] GERBER, *Economics, law and institutions: The shaping of Chinese competition law*, in 26 *Wash. U. J. L. & Pol'y* 271 (2008) and ZHENG, *Transplanting antitrust in China: Economic transition, market structure and state control*, in 32(2) *U. Pa. J. Int'l L.* 643 (2010)

[88] WEI, *Antitrust in China: An overview of recent implementation of anti-monopoly law*, in 14(1) *European Business Organization Law Review* 119-139 (2013)

[89] AML, Article 1

[90] WEI, *Antitrust in China*

relevant market. Business operators with a market share of less than 10% are excluded from the application of the presumption, even if the joint markets share, together with one or two other business operators, exceeds the presumptive thresholds.

Article 17 AML, differently from the open clause of Article 102 TFEU, forbids several explicit conducts, which are unfair selling and buying prices, predatory pricing, refusal to trade, tying of products or imposing unfair trading conditions, applying discriminatory conditions to counterparts with equal standing. Besides these conducts, the AML allows the Anti-Monopoly Authority under the State Council, which is the central people's government, to identify other conducts that can be defined as abusive. The effects do not notably differ from what happens in Europe, in which it is only with the enforcement of a competition Authority that new conduct from a dominant undertaking can be considered abusive with fair certainty.

However, the Chinese abuse of dominant position framework has run into the same issues as the European one when trying to expand its range of action to the digital markets. The central element for market definition, just like in the EU under Article 102 TFEU, was the SSNIP (Small but Significant non-temporary increase of the price) test which, as it was concluded in the previous chapter, is poorly fitting for digital markets. The frequent supply of services at zero-price in the context of a multi-sided market makes even more difficult to carry out an analysis of the effects of a possible price increase. This problem, coupled with the difficulty of assessing a digital operator dominance, became apparent in Qihoo 360 v Tencent case[91], in which concerns were raised about how to define relevant market in online markets in cases of abuse of dominant position. Tencent offered a very popular Internet social network (QQ) whose flagship feature was an instant messaging software providing several additional services, including security softwares. Qihoo, on the other hand, offered an anti-virus software and browser program (360) and, after having analysed QQ's software, informed its users that QQ was automatically scanning its users' computers and uploading those users' personal information without their consent[92]. This resulted in a commercial battle between the two companies, using "*choose one from two"* or "*either or"* policies. In other words, they were pushing merchants or users to operate only on their platforms and discourage them from operating on other platforms at the same time[93]. When in 2011 Qihoo filed a case against Tencent under Article 17 AML for abuse of dominance, it argued that Tencent had market dominance in the relevant product and geographic markets, the relevant product market being instant communication services software involving integrated audio, video and text, and the relevant geographic market being mainland China, with a 76.2% share of that proposed market. Tencent promptly denied such allegations: in its defence, it claimed that its relevant product market was the real-time communications one.

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[91] Supreme People's Court (SPC), Decision of October 2014, *Case – Beijing Qihoo Technology Co., Ltd. v. Tencent Technology (Shenzhen) Co., Ltd.*

[92] VARANINI and JIANG, *The Decision of the Supreme People's Court in Quihoo v. Tencent and the Rule of Law in China: Seeking Truth from Facts*, in 24(1) *International Law Journal* 230-272 (2016)

[93] WANG, *Platform antitrust in China*

Hence, there were other Internet products and services that could achieve the same result, and argued that the relevant market proposed by Qihoo was unduly narrow.

Regarding the market definition, the Supreme People's Court held that, despite often being an important evaluation to be done, it is not always necessary, as it is only a tool to determine the market power of the firm under assessment. The same result could be achieved by looking at barriers to entry or at potential anti-competitive effects of the firm's conduct coupled with direct evidence of such effect, which has to be demonstrated by the plaintiff. The Court recognised that, in the Qihoo 360 v Tencent case, an application of the SSNIP test would be challenging due to the non-price nature of the competition, as the products are offered at zero-price, and it was demonstrated that users would not use instant messaging services unless they were free. Therefore, the Court held it should define the product market on qualitative criteria to determine demand substitution for products and that a similar qualitative analysis should focus on product characteristics such as use, quality and ease of access. Looking at the similarities between non-integrated and integrated instant messaging servicing (*i.e.* real-time communication, offered for free, and users' preferences for text instead of video and audio even in an integrated setting), the Court decided that the non-integrated service could fall within the relevant market. The Court ruled that the market definition was still germane to whether there were additional constraints on Tencent that could prevent it from exercising market power[94]. As a result, Tencent was found not dominant, as market power needs to be assessed taking into consideration all the factors of Article 18 AML. Barriers of entry were evaluated as low due to the presence of many rival products. More importantly, the dynamic nature of the relevant market and the free nature of software involved were considered as sufficient indicators of the absence of ability of the business operator to control price, output or other relevant commercial conditions, jointly with the fact that users were not considered locked in via network effects.

The Supreme People's Court's pragmatical approach may be considered efficient, as it defines the market based on the actual characteristics of the product or service and the need they are meant to satisfy, without limiting its assessment to the identification of the relevant markets and of the market share the business operator holds in it. However, it does not seem to meet the challenges of digital markets. For instance, the Court did not consider the two-sided market phenomenon, which in the case under assessment could have given Tencent market power. The company could leverage its position in the market, taking advantage of the large installed base it had for its own differentiated platform, to extend its market share over other products that run on that same platform, in order to limit competitors' possibility of finding new users. At the same

[94] VARANINI and JIANG, *The Decision of the Supreme People's Court in Quihoo v. Tencent and the Rule of Law in China: Seeking Truth from Facts*

time, the power of returns to scale, network effect and externalities, and the possession and use of a large amount of data have been underestimated or not considered.
The Qihoo 360 v Tencent case proved that something had to change in China as well in order to guarantee actual competition protection in digital markets and that the mechanisms under the AML needed a review for the sake of addressing abusive conducts carried out by dominant business operators.

3.2 The new approach of the Chinese Antitrust enforcement: the 2021 Antitrust guidelines on the Platform economy and the Alibaba case

Before addressing the 2021 Antitrust Guidelines on the platform economy, issued by the Antitrust Committee of the State Council to guide the competition practice of competition authorities, it is necessary to point out that Qihoo 360 v Tencent case has been, until recent years, quite an isolated assessment of the conducts held by operators on the digital markets. Additionally, it was a lawsuit between private parties that brought the Supreme People's Court to rule on these issues. Considering the importance of the Internet economy in China, the absence of intervention from the Chinese competition authorities in the digital markets sector could be considered odd, but in reality, there is a reason behind it. The Chinese government follows an accommodating and prudential regulatory strategy for new industries and business models, meaning that it will not rush to solve the difficulties caused by new industries and business models but will instead wait for some time to observe how things evolve[95]. 2021 represented the year in which the country's general regulatory policy on the Internet industry shifted: the digital markets industry was deemed mature enough and no longer eligible for a softer approach, bringing about a drastic change in the attitude of Chinese antitrust enforcers towards companies operating in digital markets. The Central Economic Work Conference, held in December 2021, suggested that the country should strengthen antitrust to prevent the disorderly expansion of capital[96].
Thus, the impulse to change was two-pronged: on one side, the Antitrust Guidelines on the Platform Economy tried to address the shortcomings of the AML provisions on abuse of dominance; on the other, the competition enforcers started to monitor much more closely the conducts of the digital business operators.
The Guidelines offer some additional elements that can be considered or instruments that can be used to assess digital platforms specifically. In order to define the relevant commodity market, the chosen tool is alternative analysis, which means looking at demand and supply substitution. Under Article 4 of the Guidelines, the first step is to carry out the demand substitution analysis, which shall be based on factors such as platform functions, business models, user groups, multilateral markets and offline transactions. Where the competition constraints

[95] WANG, *Platform antitrust in China*
[96] Reuters, '*China to Keep Economic Operations "Within Reasonable Range" in 2020—Politburo'*, 2020 [Online] Available at: https://www.reuters.com/article/china-economy-politburo-idINKBN28L1H0 [Accessed 20 June 2022]

on the behaviour of business operators caused by supply substitution are similar to demand substitution, supply substitution analysis should be considered as well, analysing factors such as market entry, technical barriers, network effects, and cross-border competition[97]. In addition, against the backdrop of a platform economy, competition between rival operators is tackled by offering a core business that aims to gain broad and lasting attention from users. Leveraging the that core business' netwrork, additional services can be offered to users. Thus, in defining the relevant commodity market, the essential services of the platform and the cross-platform network effects need to be considered, deciding whether to define the platform as an independent market or to define multiple related markets separately. For the relevant geographical market, the approach implemented is similar. However, the elements that may be considered are the actual region of the goods selected by most users, the language preferences and consumption habits of users, the provisions of relevant laws and regulations, the degree of competition constraints in different regions, and the integration of online and offline. While the relevant geographical market is usually defined as the Chinese market or a specific regional market, according to the case situation, it is possible that it will be defined as a global market.

While those provisions on the market definition do not seem to add much to the traditional market definition assessment other than a particular focus on the characteristic elements of digital markets, what is innovative and yet legally problematic is the closing provision of Article 4. The Guidelines allow the competition authorities not to define the relevant market and directly determine that the business operator in the platform economy field has implemented a monopolistic behaviour in exceptional cases in which several circumstances are cumulatively present, namely *(i)* the direct factual evidence is sufficient; *(ii)* an act that can only be carried out by relying on the dominant market position has lasted for a considerable period; *(iii)* the damaging effect is obvious and *(iv)* it is insufficient or complicated to define the relevant market conditions accurately. This provision provides Chinese competition authorities with a handy and pragmatic shortcut they can use every time market definition may be problematic. What may create an issue, however, is that none of the circumstances that allow the use of this extraordinary power is clearly defined. There are not many behaviours that clearly require a dominant position to be implemented. Non-dominant undertakings can legitimately carry out almost every conduct that is prohibited: as they are unable to exploit their market power, they do not create an anticompetitive foreclosure effect. Tying, bundling, refusal to deal, even margin squeezes and predatory pricing, as well as the conducts more typical for the digital markets like self-preferencing, can be implemented by a non-dominant undertaking and they will not generate the same anticompetitive effect of a similar conduct carried out by dominant undertaking. Unless a DMA-like approach is implemented, with the designation of the subjects to which the rules apply, assessing the dominance of a business operator may be complicated without a market definition, as the dominant position represents the position held by a business operator in a

[97] Antitrust Guidelines on the platform economy, 2021, Article 4

given market. In the same way, the necessity of being dominant for "a considerable period" leaves room for doubts, as it may not be sufficiently clear how long it would take. Even the "obvious damage effects requirement" does not seem to offer clear guidance. It should be remembered that abusive conduct by dominant business operators in digital markets is often not that apparent. Not only are they rarely connected to a price dimension, but they also tend to be implemented for alleged advantages in terms of efficiency or user experience, with actual and assessable damage hard to pinpoint. Therefore, it is necessary to carry out thoughtful, evidence-based considerations and studies to ascertain the harmfulness of a conduct[98].

For these reasons, the power provided by Article 4 of the Guidelines should be considered limited to absolutely extraordinary cases and not an instrument that can be commonly used to bypass the relevant market definition. In fact, unlike the suppression of market definition in the DMA, which is counterbalanced by the gatekeeper designation, the Guidelines mechanism does not seem to offer enough legal certainty for the business operators of the platform economy.

The Guidelines are complementary and offer more specific provisions for the assessment of dominance in the field of the platform economy, which apply in addition to the general provisions of the AML. Article 11 of the Guidelines establishes which factors and circumstances should be analysed by the Competition Authority to identify or presume the dominant market position of the business operator. Specifically, the market share of business operators and the competition status of relevant markets continue to be helpful yardsticks. As it can be difficult to calculate the market share whenever a service is offered at zero-price, the amount and the number of transactions, the number of clicks, the length of use or other indicators can be used, as well as how long a business operator has maintained that market share. As for the competition status of the relevant market, the competition authority may consider the development status of the relevant platform market, the number and market share of existing competitors, the characteristics of platform competition, the degree of platform difference, economies of scale and potential competitors. The first element is, indeed, basically a market study which tries to understand if in the same relevant market of the business operator under assessment, other comparable competitors may decrease the dependency of the users on the platform and if the relevant market is stable or experiencing a time of growth or decline. Once the competitive status of the market has been defined, the competition authority can consider the aspects more directly connected to the allegedly dominant business operator. In these regards, it is possible to consider: *(i)* its ability to control the market, as in controlling the upstream and downstream markets and having the ability to hinder or influence other business operator that are willing to enter the market; *(ii)* its business model; *(iii)* the presence of network effects on the relevant platform; *(iv)* the financial and technical conditions of the business operator. These last aspects

[98] See as an example European Commission, Decision of 27 June 2017, *Case AT .39740 – 'Google Search (Shopping)*', discussed in Chapter 3

are connected to the investor's situation, asset size, profitability, financing ability, technological innovation and application ability, intellectual property rights owned, ability to grasp and process relevant data, and to what extent the financial and technical conditions can promote the expansion of the business operator's business or consolidate and maintain its market position. The mention of intellectual property rights is particularly noteworthy, as it is an aspect that receives scant attention in other regulations but may play a crucial role in an innovation-driven market.

It should be noted that in China, the major platforms are Chinese and their importance is often limited to the borders of the country. Thus, the intellectual property right, which can be more difficult to protect in a global context, may represent an important factor in assessing the technical conditions of the business operator and the potential ability of other operators to offer a similar rival service. The competition authority should then consider the degree of dependency of business users on the platform for their transactions. This element, which recalls the provision of Article 3(6) of the DMA in its original version, can be evaluated by looking at the transaction relationship between the business users and the platform, the transaction volume and duration, the presence of lock-in effects, user stickiness, the possibility and conversion cost of other platforms. In particular, lock-in effects and the user stickiness, which are directly connected to network effects but also to other commercial aspects like branding, are fundamental elements in the platform economy and more broadly in digital markets. In this regard, Qihoo 360 v Tencent demonstrated that such factors were mostly underrated in the first competition judgments related to digital markets. The last aspect that needs to be considered is the presence of barriers to entry, which can consist of economies of scale of the platform, the scale of capital investments, technical barriers, data acquisition cost, user habits and high switching costs. Multi-homing, on the other hand, can be positively evaluated since it allows users to use more services at the same time, giving the newcomers' services the chance to be used and gain users.

To sum up, the Guidelines acknowledge and embrace the characteristics of digital markets and create a supplementary system that completes the general provisions of the AML, with the purpose of a better and more efficient prosecution of abusive conduct in this context.

The first significant case in which the Guidelines have been applied and which represents the new enforcement attitude adopted by the Chinese enforcement authorities is the Alibaba case[99]. In April 2021, China's Stated Administration for Market Regulation (SAMR) announced to have fined Alibaba a sum of approximately €2.4 billion, equivalent to 4% of the company's 2019 turnover in China, after an inquiry which lasted only five months, due to a scheme implemented by Alibaba which coerced traders to sell solely on its platform, to the

[99] State Administration for Market Regulation, *Administrative Penalty Decision n. 28 – Alibaba*, 2021 [Online] Available at: http://www.samr.gov.cn/fldj/tzgg/xzcf/202104/t20210409_327698.html [Accessed 24 July 2022]

detriment of actual and potential competitors, sellers, consumers and the economy as a whole[100]. The SAMR started its analysis from the definition of the relevant market, focusing only on Alibaba as a virtual retail platform and ignoring its dual role as both marketplace and retailer. The SAMR established that retail platforms constitute a relevant product market on their own, distinct from offline business, basing its founding on demand-side and supply-side substitutability, in accordance with the Guidelines but also with the position of the Supreme People's Court in Qihoo 360 v Tencent. For users, online marketplaces offer the chance to shop anytime and anywhere in the country and to compare prices afforded by online retailers. Online retailer platforms differ from offline businesses for the lower operational costs and, above all, their ability to use aggregate data about consumers' preferences to match supply and demand and adjust in the most efficient way possible. From the supply-side substitutability point of view, the profit model of online operators has been considered peculiar since they make their profit from sales commissions and advertisement. It has also been noted that it is rare for traditional physical shops to transition to online retailing. In its assessment, the SAMR observed that online retailer platforms are two-sided markets, serving business users and consumers; therefore, both sides' viewpoints have been considered. The Authority did not use the SSNIP test, whose effectiveness for digital markets is highly reduced, although it could have been useful to assess the relationship between the online and offline retailers[101]. The SAMR also concluded that a further segmentation of the online platform by business model (*i.e.* B2C and C2C) was not necessary since there is no fundamental difference in the services provided under the two models, and neither was necessary by the method of sail and marketing or by products sold. As for the relevant geographic market, it was limited to the national borders due to the limited demand-side substitutability both on the merchant and consumer side and to the limited supply-side substitutability between the Chinese domestic market and the offshore market. According to the SAMR, the substitutability is low because of the language, an element suggested under Article 4 of the Guidelines, and other aspects like tariffs applied, which differentiate the conditions of the Chinese market from those across the border.

As for the assessment of dominance, the SAMR concluded that Alibaba held a continuous dominant position from 2015 to 2019. This decision was based on the company's market share, which oscillated between 86 % and 71% for total sales value and between 76% and 62% for total revenues.
In addition, the SAMR took into account a range of additional indicators to support its conclusion: market control ability, financial and technical conditions, users' dependency on the platform, difficulties in market entry, and Alibaba's advantages in other closely related markets. Mathematical indexes, such as the

[100] COLINO, *The case against Alibaba in China and its wider repercussions*, in 10(1) *Journal of Antitrust Enforcement* 217-229 (2022)
[101] COLINO, *The case against Alibaba in China and its wider repercussions*

Herfindhal-Hirschman Index (HHI)[102] and the four firm concentration ratio (CR4)[103], have been used in order to calculate the concentration of the market. Under Art. 17 para. 2 AML, the factors that can be considered are the ability to control the prices or quantities of commodities or other transaction conditions in the relevant market or to influence the access of other market players to the market. One of the two conditions suffices to determine dominance, but in this case, the Authority concluded that Alibaba could both control the market and hinder market entry[104].

The alleged abusive conduct was similar to the one in Qihoo 360 v Tencent, as it consisted of a 'choose one form two' strategy forcing sellers to rely exclusively on its platform. Some sellers were indeed contractually obliged not to work with competing platforms, while others were orally warned not to. Alibaba was found guilty not only of passing several measures to control the implementation of those obligations, but also of using its dominant market position, technical tools (data and algorithms) and platform rules and conditions to impose penalties on merchants. If business users were to sell on a different platform, they would be excluded from promotional exercises, get demoted in searches and see several of their rights cancelled. This conduct was considered to constitute an infringement of Article 17(4) of the AML, which prohibits dominant companies from allowing their trading counterparts to make transactions exclusively with themselves or with the undertakings designated by them without objective justification. Alibaba argued that the exclusive dealing arrangements were justified because merchants voluntarily entered into the agreement, but the SAMR rebutted these arguments on the basis of merchants' testimonies demonstrating that the acceptance of the agreement was not voluntarily but was imposed by Alibaba, as they tended to operate on multiple markets. The SAMR concluded that the conduct had an anticompetitive effect as it restricted the competition in the relevant market, hurting both actual and potential competitors, as well as sellers operating in Alibaba, whose freedom had been unduly constrained. Even consumers were found to be equally damaged, enjoying less choice and fewer trading rights.

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[102] It is a concentration index defined by the sum of the squares of the percentage market shares of each company or agent in the industry. The HHI can result in two extremes values, a maximum value of 1, in the case the market supply is represented by a single operating entity, or a minimum value of 1/n, where n is the number of entities that operate in a given market, if all the entities have equal market shares. As an example, if in the market there are 10 operators holding equal markets shares (10%), the index will be of 0,1. In Alibaba case, the index of the relevant market of the online retailing was calculated between 0,74 and 0,53, revealing a high concentration in the market.
see for a better explanation BREZINA et al., *The Hefindahl-Hirchman index level of concentration values modification and analysis of their change*, in 24(1) *Central European Journal of Operations Research* 49-72 (2016)

[103] The four-firm concentration ration (CR4) index has been the most relevant index to measure concentration before the HHI. It is given by the sum of the market shares of the largest four firms in the market. The foremost shortcoming of this index is that differences in the market structure may not show up. In Alibaba's case, the CR4 index effectively accounted for the entire industry. See NALDI and FLAMINI, *The CR4 Index and the Interval Estimation of the Hefindahl-Hirchman Index: an Empirical Comparison* (2014) [Online] Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2448656 [Accessed 24 July 2022]

[104] XIAO, *China's Antitrust Probe into the Platform Economy – A Comment on the Alibaba Decision*, in 71(5) *GRUR International* 432-438 (2022)

As the foregoing showed, the Alibaba decision marks a clear shift in competition enforcement in China's platform economy, from a relatively tolerant and cautious approach to a more proactive and stricter one, without hints of favouritism or protectionism. With this decision, the enforcement agency has directly addressed several concerns regarding the application of the antitrust policy in digital markets for the first time and demonstrated its ability to deal with the challenges of the digital economy, taking adequate steps to control the big digital dominant platforms operating in its territory[105]. The competition framework has shown to have implemented proper instruments in consideration of the characteristics of the digital markets, allowing the Authority to carry out a sophisticated analysis capable of addressing the issues generated in the application of the traditional rules[106]. In particular, what is surprising is the speediness of the SAMR's action, which, compared to the European Commission's average time of investigation of over four years, could give the Chinese system a significant advantage in delivering effective enforcement in the digital markets, in which a fast reaction is needed to avoid potential harm[107]. In these regards, it is possible to imagine that once the gatekeeper designations is completed, the DMA framework, not requiring the relevant market definition, will grant an equally rapid response from the European Commission and the national authorities of the Member States. On a different note, however, the Chinese competition enforcement framework does not seem to offer adequate guarantees. There is no possibility for a judicial review, which in the European system is a necessity that cannot be dismissed, since the competition authorities act in the proceedings both as the prosecution and the decision maker. Thus, the possibility of submitting the matter to the scrutiny of a third, impartial judge is non-negotiable, even if it entails an inevitable time extension. For this reason, the Chinese framework, formed by the combination of the AML and the Guidelines, may be represent a viable option for pursuing abuses of dominant position in digital markets. Yet, the price of that efficiency is offset by fewer guarantees for the economic operators, with the consequent risk of arbitrary decisions that could have considerable implications for those operators.

[105] XIAO, *China's Antitrust Probe into the Platform Economy*
[106] COLINO, *The case against Alibaba in China and its wider repercussions*
[107] Ibidem

Chapter 3 The Google Shopping Case: the first step for competition enforcement in digital markets

The Google Shopping case represents one of the first occasions in which the European Commission investigated abuse of dominant position in digital markets, using many of those mechanisms considered in Chapter 1 and giving rise to the current extensive intervention in this sector. This case may be interesting for many reasons as it introduces a new theory of harm, the self-preferencing, it offers answers to many issues connected to the digital markets, it has been assessed with opposite results on the two sides of the Atlantic, and the fact that, if addressed under the DMA, it would be subjected to a different proceeding and assessment despite coming to the same conclusions. Additionally, it has also been the first Google antitrust case by the European Commission (*i.e.* AT.39740-Google Shopping, AT.40099-Google Android and AT.40411-Google Adsense) to have been decided by the General Court of the EU, representing one of the first examples of judicial review of an abuse of dominant position in digital markets by an EU Court.

1. The European Commission Decision (AT.39740)

The European Commission, after having concluded the investigations and having decided that Google was dominant and that the alleged conduct was indeed abusive under Article 102 TFEU, imposed an unprecedented fine of €2.4 billion on Google Inc. and additionally ordered Google to end the infringement and to refrain from repeating any act or conduct having the same or an equivalent object or effect[1]. To understand the decision's impact, it may be helpful to trace the factual background and the argumentative process that led the Commission to its findings.

1.1 Facts

Alphabet Inc., the holding company owning Google, is the fourth most valuable company by market capitalisation with a value of $1.5 trillion[2]. Looking at the Second Quarter 2022 consolidated financial results, Alphabet achieved revenues of $69 billion, with a predicted annual total of $278 billion. Of those second quarter revenues, $56 billion was derived from advertising, which is connected for 70% to Google Search[3]. These numbers can help provide an idea of the size and importance of this company now. Still, already in

[1] European Commission, Decision of 27 June 2017, *Case AT.39740 – 'Google Search (Shopping)'* (Hereinafter "Commission Decision"
[2] Statista Research Department, *The 100 largest companies in the world by market capitalization in 2022*, 2022 [Online] Available at: https://www.statista.com/statistics/263264/top-companies-in-the-world-by-market-capitalization/ [Accessed 20 July 2022]
[3] Alphabet Inc, *Alphabet Announces Second Quarter 2022 Results,* 2022 [Online] Available at: https://abc.xyz/investor/static/pdf/2022Q2_Alphabet_earnings_release.pdf?cache=ed395cc [Accessed 1 August 2022]

2010, when the annual revenues amounted to one-tenth of what they are today[4], concerns about the conduct of a Tech Giant of this size were already arising, especially in those legal systems, like the EU was, that were more proactive towards the control of important and dominant companies' behaviours, considering the massive impacts those conducts could have for users, smaller business operators and competitors. Therefore, it should not be a complete surprise that in November 2010, the European Commission, for the first time, initiated antitrust proceedings regarding the unfavourable treatment by Google of competing vertical search service providers in Google's unpaid and sponsored search results coupled with an alleged preferential placement of Google's own services, which may have constituted an infringement of Article 102 TFEU[5]. To properly understand the conduct that raised the Commission's attention, it may be helpful to consider Google's business model and its principal activities.

First of all, Google, like many other operators of the digital markets, bases its business model on the interaction between the online products it offers at zero price and its online advertising services, from which, as explained before, it generates the primary source of revenue. In the 2021 Alphabet annual report, it was said that Google Services, which is the category that includes all Google businesses except Google Cloud (*i.e.* Google Cloud Platform and Google Workspace), generates revenue primarily by delivering both performance and brand advertising that appears on Google Search and other properties, YouTube and Google Network partners' properties[6]. Google Search, Google's general search engine, has always been, and as it may be inferred by the information expressed before still is, Google's flagship online service. In short, it allows users to search for information across the internet by entering a keyword or a string of keywords in Google Search, which returns different categories of search results, including generic search results, specialised search results, and online search advertisement[7]. While the generic search results, which typically appear on the left side of the general search results pages in the form of blue links with short excerpts, are organised through algorithms that are designed to rank pages containing any possible content based on the importance of the page, which is assumed on the number and quality of links to that page, the specialised results are provided through algorithms that are specifically optimised for identifying relevant results for a particular type of information, such as news, local business or product information. In particular, the specialised results can be accessed through both the general search and the specialised search services (*e.g.* Google Finance, Google Images, Google Shopping), which group results for a specific category of products, services, or information. Paid inclusion is the basis of

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[4] Macrotrends, *Alphabet Revenue 2010-2022/Google,* 2022 [Online] Avaliable at: https://macrotrends.net/stocks/charts/GOOG/alphabet/revenue [Accessed 1 August 2022]

[5] European Commission, *Press Release - Antitrust: Commission probes allegations of antitrust violations by Google,* 2010

[6] Alphabet Inc, *Annual Report for the financial year 2021.* The report defines *performance advertising* as the advertising which "*creates and delivers relevant (text-based) ads that users will click on, leading to direct engagement with advertisers", while brand advertising is the advertising which "helps enhance users' awareness of or affinity for advertisers' products and services, through videos, text, images, and other interactive ads that run across various devices*".

[7] Commission Decision, para. 8-13

some of Google's specialised search services, as third party websites must enter into an agreement with Google to appear in their search results.

In most cases, a pay-per-click approach is used for the service under such an arrangement. Google Shopping, the specialised search service at the centre of the Commission's investigation, falls under this category. Finally, the online search advertising results are not limited to specific categories of products, services, or information drawn from Google's auction-based online search advertising platform. Before being shown, the advertising results are evaluated through a two-step process. In the first step, a pool of relevant search advertisements is identified by matching the keywords on which advertisers have associated their search advertisements with the keywords used by the user and then, in the second step, the relevant search advertainments within the pool are ranked considering two factors, which are the maximum price advertisers have indicated they are willing to pay for each click in the second-price auction and the quality rating of that search advertisement, that is based among other things on a search advertisement's predicted click-through rate[8].

Google Shopping is one of Google's specialised search services and consists of a comparison-shopping service, returning in response to the user search product offers from the merchant website, allowing users to compare them. Google's comparison-shopping service was first launched in the EU in 2004 under the name Froogle, which operated as a standalone website where merchants could be listed for free, as it was monetised by advertisement. In 2007 the service was renamed Google Product Search, and a dedicated OneBox, which is a set usually positioned above generic search results or among the first of them, was launched. In 2012 the service was finally renamed Google Shopping, changing at the same time its business model to a "paid inclusion" model in which merchants pay Google when their product is clicked on in Google Shopping and was launched in the EU in 2013.

In this context, the alleged conduct, according to the Commission, consists of Google self-favouring its own comparison-shopping service, Google Shopping, compared to the competing ones based on a more favourable positioning and display on Google's general search results page. There were, in fact two main differences in the way that Google's own comparison shopping service and competing comparison shopping services were positioned in Google's general search results pages, as Google's own comparison shopping service was not subject to the same ranking mechanisms as its competitors, including adjustment algorithms that could demote the service when triggered, based on the compliance with Google's guidelines on website format, and the fact that Google positioned results from its own comparison shopping service on its first general results page in a highly visible place and a rich format, with pictures and additional information on the products and prices. In particular, Google's own service was always positioned at the top of the first Google general search results page. It could be placed either on the left-hand side of the page, in the same column as generic search results,

[8] Commission Decision, para. 14-25

in which case it was positioned above the first generic search result, or on the right-hand side of the page, in which case it was placed above the advertisement results. The box showed to the users could feature five to eight items spread across one or two rows[9].

On the contrary, competing comparison shopping services could appear only as generic search results, could not be displayed in rich format, and were prone to the ranking of their web pages in generic search results on Google's general search results pages being reduced ("demoted") by the algorithms. In the Commission's view, the fact that Google favoured its own comparison-shopping service compared to the competitors' ones could amount to an abuse of dominant position because Google was able to behave like this thanks to its position in the general search market, leveraging the market power Google had there to the comparison-shopping service market. Additionally, the conduct was considered to hurt consumers and innovation, as users did not necessarily see the most relevant comparison-shopping results in response to the keywords inserted, and incentives from rivals were lower since they knew that, regardless of the quality of their products, they would not benefit from the same prominence as Google's own product. For this reason, in 2015, the Commission sent a Statement of Objection to Google, requiring equal treatment of all the comparison-shopping services to allow the most relevant services to be selected to appear in Google's search results pages[10].

While, given the dimension of the company, it may seem easy to demonstrate Google's dominance and the harmful nature of its conduct, the characteristics of digital markets made the assessment much more difficult. The fact that Google Search is a service offered to users at zero-price required the Commission to innovate the criteria used for market definition and dominance assessment. The preliminary question, however, was whether the conduct could be considered abuse in the first place, as self-preferencing behaviour had never been assessed before in traditional markets, in which undertakings promote as much as possible their own products and services over those of the competitors was normal and could not rely on a specific theory of damage to demonstrate that such conduct was actually harmful to consumers[11].

1.2 The theory of harm

Before the Commission Decision, a debate about the potential qualifications of the conduct under assessment was raised, trying to reconduct Google's self-preferencing behaviour within the traditional framework of the theories of harm in order to find out which was the correct legal test to apply. Several options were identified,

[9] Commission Decision, par. 395
[10] European Commission, *Antitrust: Commission sends Statement of Objection to Google on comparison shopping service,* 2015
[11] DE SOUSA, *What Shall We Do About Self-Preferencing?*, in *Competition Policy International, June Chronicle* (2020) [Online] Available at: https://ssrn.com/abstract=3659065 [Accessed 2 August 2022]

including the refusal to deal, discrimination and tying[12]. Regarding the first option, the refusal to deal theory of harm and the connected essential facility doctrine have already been discussed in Chapter 1. The Commission's request for equal treatment of rival services has been considered indeed similar to the demand for the dominant undertaking to accept a downstream or related market competitor into its distribution system and to grant access on conditions similar to those on which its products or services are offered in which case it would have been necessary for the Commission to demonstrate that Google Search, the upstream service, constituted an essential facility[13]. Applying the Bronner test discussed in Chapter 1 would have required the qualification of Google Search as indispensable for the comparison-shopping services on the downstream market. However, regardless of its market share, a single search engine is unlikely to constitute an essential facility if alternative search engines make it possible to find websites. If there are other potential routes to market competitors, not all effective competition will be eliminated.[14] According to others, the fact that Google engaged in this conduct, which raised rivals' costs, once it realised that its service was not successful could be interpreted as proving that the behaviour was analogous to a termination of a course of dealing, which similarly requires indispensability [15].

The circumstance further denies the indispensability requirement that the other comparison-shopping services were shown in Google's general search results pages, in addition to relevant sponsored links from any sites which have purchased advertisements to display in the space on the result page in response to a search for that item, meaning that they were still accessible through Google Search, even if not in the same way as Google's service. Therefore, if the refusal to deal or to supply legal tests were applied, Google's conduct would likely not have integrated the requirements to be considered abuse.

A second option was represented by discrimination. Under Article 102 TFEU, abuse may consist of applying dissimilar conditions to equivalent transactions with other trading parties, placing them at a competitive disadvantage[16]. However, given the explicit requirements of putting other trading partners at a competitive disadvantage, it seemed difficult to apply the prohibition to discrimination between one's self service and others'. Additionally, it has been argued that considering that Google was vertically integrated regarding its general search engine and specialist comparison-shopping service, the requirement of dissimilar conditions to equivalent transactions could not be met, as the internal cost structure of a vertically integrated undertaking

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[12] AKMAN, *The Theory of Abuse in Google Search: a Positive and Normative Assessment under EU Competition,* in 2 *U. Ill. J.L. Tech. & Pol'y* 301-374 (2017)

[13] VESTERDORF, *Theories of Self-Preferencing and Duty to Deal--Two Sides of the Same Coin?*, 1(1) *Competition L. & Pol'y Debate* 4-9 (2015)

[14] German Monopolies Commission, *Competition Policy: The Challenge of Digital Markets*, 68 Special Report 58 (2015)

[15] COLOMO, *Indispensability and Abuse of Dominance: From Commercial Solvents to Slovak Telekom and Google Shopping,* in 10(9) *J. Eur. Competition L. & Practice* 532-551 (2019). See also Court of Justice of the EU, Decision of6 March 1974, *Joined Cases C-6/7-73 Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission of the European Communities*, ECLI:EU:C:1974:18

[16] NAZZINI, *Google and the (Ever-Stretching) Boundaries of Article 102,* in 6(5) *J. Eur. Competition L. & Prac. 301 (2015)*

cannot be considered equal to a sale to a non-vertically integrated third party, thus making the transactions in question nonequivalent[17].

The tying practice could have been recognised in the joint offer of Google content to search general results with specialised search tools[18]. Nonetheless, Google there was no contractual relationship between the users of Google Search and Google by which the latter obliged the additional use of the specialist service, making it difficult to consider the presence of a tying other than technical, which is potentially abusive when the tying product is designed in such a way that it only works properly with the tied product and that in any case did not seem to be present for Google's products[19].

The main point here is that no theory of harm seemed to be suitable for Google's conduct, and among those that could be used, none seemed to lead to the conclusion that the conduct should have been considered harmful. This means that the Commission needed to use a more empirical method to demonstrate that behaviour that was not well theoretically defined was actually harmful under Article 102 TFEU standards.

Ultimately, in its decision, the Commission did not use any specific theory of harm but referred to the generic abusive leveraging, in which an undertaking with a dominant position in a given market tries to extend that position to a neighbouring but separate market by distorting competition, claiming that the fact that a dominant undertaking's abusive conduct has its adverse effects on a market distinct from the dominated one does not preclude the application of Article 102 TFEU, as the dominance, the abuse and the results of the abuse doesn't need to be all in the same market[20]. The Commission held that "*such a form of conduct constitutes a well-established, independent, form of abuse falling outside the scope of competition on the merits*"[21]. In support of this qualification, the Commission relied on CBEM- Télémarketing case[22], in which it was ruled that the conduct consisting of an undertaking holding a dominant position on a particular market reserving "*to itself or to an undertaking belonging to the same group an ancillary activity which might be carried out by another undertaking as part of its activities on a neighbouring but separate market, with the possibility of eliminating all competition from such undertaking"* can amount to abuse within the meaning of Article 102 TFEU. However, it should be noted that according to the test set out in CBEM- Télémarketing, indispensability is a condition to establish a breach of Article 102 TFEU. At the same time, the Commission considered that this requirement did not have to be proven[23]. The Commission did not apply the refusal to supply theory of harm,

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[17] NAZZINI, *Google and the (Ever-Stretching) Boundaries of Article 102*
[18] EDELMAN, *Does Google Leverage Market Power Through Tying and Bundling?,* in 11 *Competition L. & Econ.* 365 (2015)
[19] AKMAN, *The Theory of Abuse in Google Search* and European Commission, *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,* in C 45 *O.J.* (2009)
[20] Commission Decision, par. 334
[21] Ibidem, par. 649
[22] Court of Justice of the EU, Judegment of 3 October 1985, *Case 311/84 – 'Centre belge d'études de marché - Télémarketing (CBEM) v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB)'*, ECLI:EU:C:1985:394
[23] COLOMO, *Indispensability and Abuse of Dominance*

arguing that Google's conduct, as described in the previous paragraph, consisted in the active behaviour of more advantageous positioning and display of its own comparison-shopping service as opposed to competing comparison shopping services, rather than in a passive refusal to grant competing comparison-shopping services access to a portion of its general search results pages, and that to stop the infringement Google was not required to transfer an asset or enter into an agreement with one or more competing comparison-shopping services with whom it has not decided to contract[24]. The Commission argued that, from a formal point of view, it was asking Google to cease and desist its course of conduct, and it was not imposing a duty to deal with a rival[25].

To demonstrate that Google's conduct was indeed an abuse under Article 102 TFEU, the Commission had to prove that the behaviour tended to restrict competition or was capable of having that effect which, in its reasoning, occurs not only where access to the market is made impossible for competitors, but also where the conduct under assessment can make the access more difficult, causing interference with the structure of competition on the market, to the detriment of consumers, who should have the possibility to benefit from the maximum possible level of competition, and of competitors, who should be able to compete on the merits for the entire market and not only for a part of it[26]. Under this definition, the conduct of a dominant undertaking in a particular segment of a market shall be considered abusive even if its competitors remain free to compete in the other segments.

After having compared how Google treated its shopping-comparison service and the competitors', the Commission explored the effects of the conduct. After having explained, based on the requests for information received from Google's competitors, that user traffic is fundamental for the ability of a comparing-shopping service to compete, it was shown how the conduct decreased traffic from Google's general search results pages to competing comparison shopping services and increased traffic to its service. This conclusion was based on the analysis of user behaviour, which indicated that the generic search results generated significant traffic to a website for those ranked between the first three to five generic search results on the first page because users pay little or no attention to the remaining generic search results, as confirmed by the fact that the ten highest-ranking generic results on the first Google general search results page receive approximately 95% of all the clicks[27]. Additionally, the Commission held, based on the data provided by competitors for the period 2011-2016, that the traffic diverted by the conduct accounted for a large proportion of traffic to competing comparison shopping services and could not be effectively replaced by other sources currently available to them. For these reasons, the conduct was considered capable of having, or likely to have, an anticompetitive

[24] Commission Decision, para. 650-651
[25] COLOMO, *Indispensability and Abuse of Dominance*
[26] Commission Decision, par. 339
[27] JANSEN at al., *Real life, real users, and real needs: A study and analysis of user queries on the Web*, in 36(2) *Information Processing and Management* 200-227 (2000)

effect in the national markets for comparison-shopping services, potentially leading to higher fees for merchants, higher prices for consumers and less innovation due to the potential foreclosure of the competing services, which would allow Google to lead competitors to leave the market, with an exclusionary effect, and a simultaneous reduction of the incentives for competitors to innovate and invest in the development of innovative services and for Google to improve the quality of its service. At the same time, the conduct was considered capable of reducing the ability of consumers to access the most relevant comparison-shopping services due to the behaviour of the users, who tend to assume that search results that are ranked highly in generic search results on Google's general search results pages are the most relevant for their queries and click on them irrespective of whether other results would be more relevant for their queries and to the fact that Google did not inform users that its comparison service was positioned and displayed in its general search results pages using different underlying mechanisms than those used to rank generic search results[28].

It can be noted that the Commission while presenting the behaviour as discrimination, has never used the word nor made any references to Art. 102(c) TFEU. This could happen because discrimination is presumably the most open-ended and unsettled of all legal standards [29]. Commission's approach is still within the limits of Art. 102 TFE, which covers, in principle, all forms of behaviours detrimental to competition and the functioning of the market. Therefore, linking a problematic behaviour to a specific and predefined abuse standard is not required, making it possible to develop new abusive standards. However, it remains somewhat unusual for the Commission to advance a decision without having a basket of cases upon which to rely in support of why the demonstrated behaviour clearly infringes Art. 102 TFEU and generally accepted commercial practice. The primary objection that has been made to the decision is how it refuses to engage with its own novelty[30]. At the same time, it may raise concerns from a legal certainty perspective because undertakings now know that the Commission can persecute any conduct that may have harmful effects, despite not having solid foundations to demonstrate it[31].

The abusiveness of the conduct, however, is based on the assumption that Google is dominant in the general search services market. It is then necessary to consider the method the Commission used to define the markets and assess Google's dominance, considering the issues created by the main features of the digital markets.

[28] Commission Decision, para. 591-598
[29] BERGQVIST, *Google and the Search for a Theory of Harm,* in 39(4) *European Competition Law Review* 149-151 (2018)
[30] JONES and SUFRIN, *EU Competition Law, Text, Cases and Materials (7th edition)*
[31] EBEN, *Fining Google: A Missed Opportunity for Legal Certainty?,* in 14 *European Competition Journal* 129 (2018)

1.3 Market definition

The Commission identified two relevant product markets: the market for general search services and the market for comparison shopping services. The goal was to demonstrate Google's leveraging of market power from the first relevant product market to the second, to the detriment of competition, competitors and consumers[32].

The provision of general search services constituted a distinct product market on four grounds.

First, it has been considered to constitute an economic activity. The Commission highlighted that users do not pay monetary consideration for the use of general search services, but they still contribute to the monetisation of the service. Due to the two-sided nature of the platform, the data provided by the users of the general search service that can be stored and re-used by the platform to improve the relevance of the search service and show more relevant advertising are precious. Despite the general search service being offered for free, the platform generates value on the other side, the online search advertising, whose demand is interdependent with that of the general search service and in which the value for the platform depends on the number of users, favouring platforms with strong network effects. Furthermore, the Commission identified parameters, other than price, of competition between general search services, including the relevance of the results, the speed with which results are provided, the attractiveness of the user interface and the depth of indexing of the web[33]. As expressed in the first chapter, when the SSNIP test is not an option, the service functionalities and its characteristics may provide helpful information[34]. Therefore, it is possible to compete on the merits within a specific relevant market, without a price, just looking at the quality of the service offered.

Second, the demand side substitutability with other online services by which users can explore the web, such as content sites, specialised search services and social networking sites, was assessed as limited. The goal of a general search service is to guide users to other sites, provide all possible relevant results, searching the entire internet, and help users to find the content they are looking for. None of the other possible options has the same goal or provides similar functionalities, and from the users' perspective, they are not genuine alternatives. Focusing on the separation between the general and the specialised search service, the Commission held that the two services differed in nature, as specialised search services only focus on providing specific information or purchasing options in their particular field of specialisation. Furthermore, technical features vary, as the two services usually rely on different data sources and are monetised differently. Specialised search service generates revenues from paid inclusion, service fees or commissions on top of the advertising service. The Commission also relied on other practical elements, such as the history of the

[32] Commission Decision, par. 154
[33] Commission Decision, para. 157-160
[34] European Commission, Decision of 6 September 2018, *Case M.8788 – 'Apple/Shazam'*, para. 79-85

development of the products, finding that many specialised search services had been offered on a standalone basis for many years, or Google's help page, which described Google Shopping as a service distinct from Google Search and with different functionality and purpose. Finally, the two services were regarded as complementary rather than substitutable, as they could both be used by the same users, depending on their needs and the results they are trying to get[35].

The substitutability was considered to be also limited on the supply side because to offer general search services, providers need to make significant investments, including the initial costs for the development of algorithms and the cost of crawling and indexing the data. The importance of the economies of scale and network effects, which derives from the need for a large amount of data provided by the users to offer a better and more efficient service, should also be considered, as they make it even more difficult for new providers to provide that service.

Once it has been clarified that general and specialised search services are not part of the same relevant market, the Commission held that the comparison-shopping services constituted a distinct relevant product market as well, as they are not interchangeable with the service offered by search services specialised in different subject matters, online search advertising platforms, online retailers, merchant platforms and offline comparison-shopping tools[36]. Since it may be argued that Google Search and Google Shopping results are substitutes, as the intended use of consumers will lead them to click on both sponsored and shopping ads, and the nature of both types of ads is that they answer the same intrinsic need of consumers, which is the search for a website selling a particular good, it may be helpful to consider the reasons why comparison-shopping services and online search advertising platforms have been deemed to have limited substitutability[37]. Again, the Commission carried out a qualitative analysis of the two services and found that the services provided were not interchangeable from the perspective of users and online retailers[38].

From the users' perspective, comparison-shopping service is perceived as a service for them that they can use to navigate, directly or through a general search service, search for a product and receive specialised search results. On the contrary, online search advertising is not perceived as a service offered to users, who do not enter keywords in a general search engine specifically to receive search advertising results, as it is demonstrated by Google not offering a standalone service to receive search advertising directly. From online retailers' and other advertisers' perspectives, the two services are complementary and not substitutable, as only specific subsets of advertisers can bid to be listed in comparison shopping services, whereas any advertiser can bid to be listed in online search advertising results and to participate in the two services, different

[35] Commission Decision, para. 166-177
[36] Commission Decision, par. 191 et seq.
[37] BROOS and RAMOS, *Competing Business Model and Two-Sideness: An Application to the Google Shopping Case,* in 62(2) *Antitrust Bulletin* 382 (2017)
[38] Commission Decision, par.196 et seq.

conditions must be met[39]. Differences also comprised the formats used to display the results, the parameter used to bid for the appearance on the platform (*i.e.* product or keywords), and the possibility to appear on Google's search result page. Considering all these factual elements, the Commission concluded that there was no substitutability between the two services, which had to be placed in different relevant markets.

The same conclusion was reached for merchant platforms, that were considered to have a different purpose, acting as a place where retailers and consumers can conclude sales, and are perceived by users as multi-brand retailers, a final destination where users can buy products. They are also different from comparison shopping services as they offer after-sale support and list offers for second-hand products from non-professional sellers.

The Commission also held that carrying out a SSNIP test was not required. It argued that the test is not the only method available to the Commission when defining the relevant market and that there is no hierarchy between the types of evidence that can be used in making an overall assessment of all the elements. Moreover, it was stressed that the SSNIP test would not have been appropriate because Google provided its search service to users at zero-price[40].

Regarding the relevant geographical market, although at first sight it would seem global or at least limited to the EU, the Commission concluded that for both services, the boundaries were national because of the offer of localised sites, the language limitations, the national and local preferences[41].

To conclude, in the Google Shopping case, it is possible to identify a prototype of the scheme for relevant market definition in digital markets. The SSNIP test is abandoned, leaving space for a purely qualitative analysis of the activities, their purposes and their characteristics. The potential risk is that Commission may have too much room for manoeuvre, highlighting the differences and not the similarities when they need, as is usually the case, a restrictive product market definition.

1.4 Assessment of dominance

It is now time to retrace the process that led the Commission to define Google's domain position. Preliminarily, the Commission, despite acknowledging that large market shares may not be necessarily indicative of a dominant position in fast-growing sectors characterised by short innovation cycles, held that if the market does not show any signs of instability during the period at issue, but rather a stable hierarchy can be identified, there

[39] As an example, online retailers and merchant platforms wishing to be listed in Google Shopping need to give Google, at least every 30 days, dynamic access to structured information on the products that can be purchased on their websites, including dynamically adjusted information on prices, product descriptions and the number of items available in their stock. See Google, *Requirements for Shopping Campaigns* [Online] Available at: https://support.google.com/google-ads/answer/6275312?hl=en&ref= [Accessed 3 August]

[40] Commission Decision, para. 242-246

[41] MÄIHÄNIEMI, *Competition Law and Big Data,* 147

cannot be any preclusion for the application of competition rules[42]. The fact that a service is offered free of charge has also been considered a factor to be take into account. The Commission concluded that Google held a dominant position in each national market for general search since 2008 (except from Czech Republic, where the dominant position started in 2011) on four grounds, which are Google's market share, the existence of barriers to expansion and entry, the infrequency of user multi-homing and the existence of brand effect, the lack of countervailing buyer power.

Starting from market shares, which traditionally are the central element of the dominance assessment, it should be remembered that, being the service offered to users at zero-price, indicators different from sales needed to be considered. Therefore, the Commission used market share by volume instead of by value, referring to several calculation methods, including per number of queries, users, page views or per number of sessions, and found out that in 2016 Google was holding market shares of around 90% in almost every Member State. Regarding barriers to entry and expansions, the characteristics of digital markets played a fundamental role. Together with significant time and resources investments for the establishment of a functioning general search engine, the Commission considered the necessity of a large amount of data, returns to scale, direct and indirect network effects and positive feedback effects. In particular, the fixed cost of producing information may be high[43]. Search data are fundamental to refine the relevance of general research service's result pages. It is necessary to receive a certain volume of queries in order to be able to compete and the greater the number of queries received, the quicker the provider will be able to update and improve the results, even for the uncommon searches[44]. Thanks to network effects, Google is able to provide higher quality search results than those offered by competitors, as every search conducted on its general search service offers free information on what is being searched, by whom and how often. In fact, trial-and-learning effects, which is at the base of Google's service higher quality, require large amount of data to function, and Google's popularity enables more experimentations, which result in better result quality and, therefore, even more popularity[45]. This situation gives Google a significant advantage over rivals thanks to economies of scale and scope[46].

Another aspect considered by the Commission was the infrequency of multi-homing and the existence of brand effects. It was indeed found out that despite users having the technical ability to switch between different general search services, only a minority of European Google users used other general search services. Applying the traditional criteria to the switching-cost analysis, they should be low, as users do not have to pay anything in order to switch to a different general search service and the operation should be easy. However,

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[42] Commission Decision, par. 267
[43] BIRCHLER and BUTLER, *Information Economics,* 90
[44] Commission Decision, para. 287-288
[45] STUKE, *Behavioural Antitrust and Monopolization,* in 8(3) *Journal of Competition Law and Economics* 557 (2012)
[46] MÄIHÄNIEMI, *The Role of Innovation in the Analysis of Abuse of Dominance in Digital Markets: The Analysis of Chose Practices of Google Search,* in 1(1) *Market and Competition Law Review* 111-137 (2017)

the result changes significantly when considering the findings of behavioural economics, such as consumer inertia[47]. Users are generally affected by a *status quo* bias, which entails users perceiving as cost the process of learning how to use new technologies, and are therefore resistant to change from a technological solution they are accustomed to[48]. It should be also considered that Google tries to lower the cognitive costs of users by providing easy access to its complementary services, becoming the default option for many users. If the strength of the Google brand and the consequent user trust in the relevance of search results provided by Google Search are added to the picture, it becomes apparent that it would be very difficult for a competitor to challenge Google's position in the general search service market[49].
The Commission concluded that Google had both significantly high market-share and the benefit of high entry barriers, considering all the characteristics of digital markets.

Google appealed the decision, claiming that the Commission had wrongly evaluated the circumstances, the facts and the conduct's effects. The appeal was decided before the General Court of the European Union.

2. The General Court Decision (T-612/17)

The General Court ruled on the Google Shopping case at the end of 2021, ultimately confirming the Commission's decision, and dismissing almost every Google's plea[50]. As stated before, this decision plays a particularly important role in the shaping of the abuse of dominant position policy applied to digital markets, as it confirms the mechanisms used by the Commission in its assessment and legitimates Commission's enforcement intervention against new conducts of dominant undertakings in digital markets.

2.1 Google's pleas

Google raised six pleas for annulment of the Commission Decision. They are going to be analysed following the order of the Court.
Firstly, Google argued that its practices were quality improvements in its online search service, thus constituting competition on the merits. Therefore, in Google's opinion it could not be treated as abusive and consequently the Commission required to provide competing comparison-shopping services with access to its improved services, without satisfying the necessary strict case law conditions. The General Court recognised

[47] MÄIHÄNIEMI. *Competition Law and Big Data*
[48] SAMUELSON and ZECKHAUSER, *Status Quo Bias in Decision Making,* in 86 *Indiana Law Journal* 1527-1586 (2010)
[49] Commission Decision, par. 312
[50] General Court of the EU, Judgment of 10 November 2021, *Case T-612/17 – 'Google and Alphabet v Commission',* ECLI:EU:T:2021:763 (Hereinafter "Court's Decision")

that while leveraging practices are not directly prohibited by Article 102 TFEU, but the provision is still applicable to them due to the special responsibility of dominant undertakings not to impair genuine, undistorted competition on the internal market. It was held that the Commission, having considered the importance of traffic generated by Google's general search engine for comparison shopping services, the user behaviour when searching online and the fact that diverted traffic from Google's general results pages accounted for a large proportion of traffic to competitors, had qualified the conduct capable of leading to a weakening of competition on the market. Therefore, according to the Court, the Commission did not just identify leveraging but "*classified Google's accompanying practices in law on the basis of relevant criteria*"[51]. Google's conduct consisted not only in the more favourable display and positioning of its products, but also in the simultaneous demotion of results from competing comparison-shopping services. The Court concluded that "*there* [was] *an infringement on the basis, first, of suspect elements in the light of competition law (in particular an unjustified difference in treatment) which are absent in the case of a refusal of access and, secondly, of specific circumstances* […] *relating to the nature of the infrastructure from which that difference in treatment arises (in this instance, importance and being not effectively replaceable, in particular)"*[52]. Thus, the Court held that the Commission had demonstrated the harmfulness of Google's conduct. Regarding the second part of the plea, the Court held that the conduct under assessment does not constitute a refusal to supply but represents an independent form of abuse of dominance. This free-standing abuse subsists even if access to the platform or infrastructure on which it takes place is not indispensable for rivals acting on an adjacent upstream or downstream market and the self-preferencing does not completely eliminate competition on that adjacent market[53].

As for the second plea considered, Google argued that the facts had been misstated, since the implemented schemes had the goal of improving the quality of its service, and not to drive traffic to its own comparison-shopping service, and that its practice was in any case not discriminatory, treating different situations differently for the legitimate reason of improving the quality of its results. However, the Court reaffirmed the principle that the abuse of dominant position is an objective concept and that therefore the Commission had no obligation of establishing the existence of anticompetitive intent. Regarding the discrimination, the Court held that the difference in treatment could not be attributed to an objective difference between two types of online result but was the result of Google's choice to treat results from competitors' services less favourably than those form its own service, confirming the Commission's interpretation.

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[51] Ibidem, par. 175
[52] Court's Decision, par. 197
[53] DEUTCHER, *Google Shopping and the Quest for a Legal Test for Self-Preferencing under Article 102 TFEU,* in 6(3) *European Papers* 1345-1361 (2022)

Google tried to argue that neither treating product ads and generic results differently amounted to favouring because the nature of the two-sided, ad-founded business model necessarily required to show paid ads differently from generic results, and that in any case product ads did not benefit Google Shopping. The Court dismissed this plea, as the relevant comparison for discrimination was not between Google's comparison-shopping results and text ads, but between the first one and results from competing comparison-shopping results that might be included in the general search results and that could not receive the same treatment of Google's own service[54].

Google contested the Commission's decision even for the anticompetitive effects proof, as it argued that the Commission only speculated about those anticompetitive effects, without demonstrating any tangible effect. The Court held that Article 102 TFEU does not distinguish conduct that are anticompetitive by object from those that are anticompetitive by effect, as Article 101 TFEU does. It only prohibits any conduct of a dominant undertaking "*which, on a market where the degree of competition is already weakened precisely because of the presence of the undertaking concerned, through recourse to methods different from those governing normal competition in products or services on the basis of the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing or the growth of that competition*"[55]. The Commission had to demonstrate the effects, even potential, that might have been attributed to the conduct of restricting or eliminating competition in the relevant markets but was not required to identify actual exclusionary effects nor to demonstrate that possible consequences of the elimination or restriction of competition actually manifested. The Court considered that the Commission had correctly established significant material effects of Google's practice on traffic from its general results pages, resulting in a decrease in that traffic to competing comparison shopping services and an increase to its own comparison-shopping service and that traffic from Google's general search results pages accounted for a large proportion of the overall traffic of comparison-shopping services competing with Google and that therefore it had "*demonstrated that the practices at issue affected Google's competitors sufficiently or, at the very least, the situation of a significant category of Google's competitors, for the Commission to be able to find that there were anticompetitive effects of an abuse of a dominant position"*[56]. The Court, however, held that the anticompetitive effects identified regarded only the comparison-shopping service market. While the Commission relied on specific information for that market to infer, following a reasoned argument, that there were potential anticompetitive effects, the same could not be said for the national markets for general search

[54] Court's Decision, para. 318-319
[55] Court's Decision, par. 437
[56] Ibidem, par. 527

services. Therefore, Google's plea was upheld for the part concerning the general search service market but not for the one concerning the comparison-shopping service markets.

The market definition was contested as well. Google insisted that merchant platforms are active in the same market of comparison-shopping service providers, as they both provide users the same product search functionality, including products' price information. The Court stressed that to be considered the subject of a sufficiently distinct market in application of Article 102 TFEU, it must be possible to distinguish the service or good thanks to particular characteristics that differentiate it from other services or other goods so that it is interchangeable with them only to a small degree and it is only slightly affected by competition from them. This evaluation needs to be carried out considering the objective characteristics of the products or services, the supply and demand structure and the competitive conditions[57]. The Court held that the Commission had considered the two-sided nature of the market in question, including an analysis of the demand from the point of view of both internet users and online sellers and demonstrated that marketplaces answer to different use goals for both sides of the market compared to comparison-shopping services[58]. Therefore, the market definition operated by the Commission was considered correct, confirming the legitimacy of the instruments used and considerations done.

The last aspect that is going to be considered is Google's arguments regarding objective justifications of the conduct. Google insisted that the Commission had not rebutted the procompetitive justifications put forward and had failed to explain how Google could have shown the specialised products search results from competing comparison-shopping services using the same process and methods as those used for its own service since it would have been technically impossible to do so. The Court dismissed these arguments, affirming that the Commission had correctly pointed out that Google did not put forward any argument relating to the unequal treatment of its own CSS results and those from competing CSSs, but only relating to the procompetitive benefits of the mechanisms for adjusting generic results and to the positioning of Google's own service. Google argued that the request to position and display the results from competitors in the same way as those from its own comparison-shopping service would have reduced competition because users expect each search service to present its own results, and that would have reduced Google's ability to monetise its general results page. However, the Court stressed that the Commission responded that Google had not demonstrated that users expected search engines to provide results from a single source and that, moreover, ensuring equal treatment on its general results page did not prevent the monetisation of certain spaces on that page (which Google

[57] General Court of the EU, Judgment of 21 October 1997, *Case* T-229/94 – '*Deutsche Bahn* v *Commission*', ECLI:EU:T:1997:155,
[58] Court's Decision, para. 474-495

controlled). Concerning the technical impossibility, the Court stated that absent any efficiency gains, it is irrelevant that what was done to achieve them could not be implemented technically other than by the practices penalised by the Commission[59].

2.2 What has been left out?

The General Court's judgement has substantially confirmed the Commission's decision and its approach toward the abuse of dominant position in digital markets. However, it has been stated that this decision leaves some issue unsolved.

An essential aspect that should be considered is that the General Court recognised Google's self-preferencing as a free-standing abuse, but it did not properly establish a clear legal test that could have provided guidance as to when self-preferencing clashes with competition on the merits[60]. It has been clarified that leveraging can be assessed under Article 102 TFEU, but it is not a specific form of abuse in itself. Similarly, the discriminatory part of the conduct has not been clarified, as the Court highlighted that the principle of equal treatment not only constitutes a general principle of EU law but also forms the very basis of equality of opportunity between competitors, which is a prerequisite of undistorted competition, but without specifying clear conditions for its application in the relationship between an undertaking and its competitors. The Court seems to carry out a "no economic sense test"[61], contending the change from the initial Google's business model for its comparison-shopping service was indicative of the abuse, as the self-preferencing represented an exception and was possible only by virtue of Google's market power. This test has also been defined as "certain form of abnormality test", as it requires to look at specific findings in order to understand whether the undertaking has adopted an extraordinary conduct which harms the equality of opportunities between the various economic operators[62]. However, if applied as in Google Shopping case, this test would imply that a dominant undertaking's special responsibility may prevent it from altering its business model, if such a change turns out to be disadvantageous for competitors' services or products relative to the dominant firm's own products and services[63]. If that was true, Google Search would be treated as a public utility, requiring Google to guarantee equal access for all interested third-party operators. Thus, the judgement does not solve the matter of exactly when unequal treatment in the form of self-preferencing amounts to an abuse and thus fails to establish any limiting principle that delineates the scope of the special responsibility of dominant firms under art. 102

[59] Ibidem, para. 585-595
[60] DEUTCHER, *Google Shopping and the Quest for a Legal Test*
[61] WERDEN, *The "No Economic Sense" Test for Exclusionary Conduct*, in *Journal for Corporation Law* 293 (2006)
[62] KOLASINSKI, *Self-preferencing in European Union Competition Law after the Google Shopping judgment,* in 43(9) *E.C.L.R.* 435-440, 439 (2022)
[63] DEUTCHER, *Google Shopping and the Quest for a Legal Test*

TFEU[64]. Dominant firms have no indications of how far they can go in designing their products and services in a way that grants preferential treatment to them. It was neither stated if the abuse requires the presence of both favouring own products and services and demoting competitors' or if it is sufficient for only one of those elements to be present.

3. The Google case in the US: completely different results

The same facts that in Europe led to Google's conviction by the Commission were also investigated in the USA. However, the outcome was the opposite. The alleged conduct was examined in a Federal Trade Commission investigation[65] and in a private lawsuit against Google in Federal Courts[66]. In both cases, the possibility of antitrust harm arising from such practices has been ruled out. It should be remembered that, according to the traditional leading approach in the US, the most significant type of error in antitrust analysis and enforcement is not under but overenforcement, in particular, to reach the erroneous conclusion that practice is anticompetitive, being unable to distinguish it from pro-competitive conduct. In general, it is considered to be always better to avoid enforcement if it is not sure that the conduct is harmful[67]. Innovation is closely related to antitrust errors because enforcement against new products and business practices may deter future investments, which are not only costly but also extremely risky[68]. It has also been stated that economic actors should not be asked to identify, understand, and assess the pro-competitive, profit-maximizing basis for their successful behaviours, as they are hampered by cognitive limitations[69].

With these premises in mind, it is possible to understand better the outcomes of the investigations in the US.

In 2012, the FTC opened its investigation of Google's search-related practices, focusing on three categories of allegations concerning preferential placement on its search engine results page of its properties, use of data obtained without compensation from third-party websites and contractual restrictions in the licensing of its application interface information for AdWords[70]. After a period of more than 18 months, the FTC decided to close its investigation and not to file a complaint against Google for alleged search bias. However, it succeeded in extracting from Google voluntary commitments, over a period of five years, to prevent Google from

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[64] DEUTCHER, *Google Shopping and the Quest for a Legal Test*

[65] FEDERAL TRADE COMMISSION, *FTC Report on Google,* 2012 [Online] Available at: http://graphics.wsj.com/google-ftc-report/img/ftc-ocr-watermark.pdf [Accessed 4 August 2022].

[66] United States District Court, N.D. California, Judgment of 22 January 2007, *Case C 06-2057 JF – Kinderstart.com LLC v. Google Inc.*

[67] MANNE and WRIGHT, *Google and the limits of antitrust: The case against the case against Google*, in 34(1) *Harvard Journal of Law & Public Policy* 171-244 (2011)

[68] HAUSMAN, *Valuation of New Goods under Perfect and Imperfect Competition,* in BRESNAHAN AND GORDON, *The Economics of New Goods,* Chicago, 209

[69] ARMAN and ALCHIAN, *Uncertainty, Evolution, and Economic Theory,* in 58 *J. Pol. Econ.* 211 (1950)

[70] GILBERT, *U.S. Federal Trade Commission Investigation of Google Search*, in KWOKA and WHITE, *The Antitrust Revolution*

removing and displaying rival websites' content and to remove restrictions on the use of Google's AdWords advertising platform[71]. In the investigations, the FTC apparently overcame the initial problems in the definition of relevant markets and in dominance assessment by generally defining a relevant market for general search, a secondary market for vertical search services and affirming Google was the dominant provider of general search in the United States, with a market share of at least 66.7%[72]. Despite having found direct evidence that Google demoted its rivals in shopping results and that such demotion could break rival companies, resulting in Google directly using its position of strength in search services to force potentially competing companies to give-up assets, and that consumers may have been harmed by reduced innovation, the FTC still decided not to file a case under Sherman Act Section 2[73]. The main issue for the FTC was, in fact, to consider the conduct abusive under the efficiency rationale. In Google Search, it is in the nature of the search engine business model to list results and rank them by applying specific algorithms. It could be argued that the business model itself justifies the fact that not every site is displayed equally in the results since this is neither technically possible nor desirable[74]. The conduct could, within this interpretation, satisfy both the requirement of being objectively necessary and generating efficiencies due to the nature of the business model of a search engine. In this sense, the FTC concluded that Google's prominent display of its own vertical search results had the primary goal of quickly answering and proposing the best results for users' search queries by providing directly relevant information[75]. The evidence suggested that Google likely benefitted consumers by prominently displaying its specialist content, which was supported by the fact that Google would typically test, monitor, and carefully consider the effect of introducing its specialist content on the quality of its general search results, demoting its content to a less prominent location when a higher ranking adversely affected user experience[76]. It was indeed possible to consider Google's quality score metric an innovative and effective algorithm for predicting click-through rates and facilitating efficient pricing, fulfilling a pro-competitive function[77]. Moreover, the FTC also recognised that American Courts had been reluctant to accept Sherman Act Section 2 cases where companies that have been legally trying to protect their market share ended up harming competitors and entrenching their market power[78].

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[71] BERGQVIST, *Revisiting FTC's 2013 Google Decision,* 2021 [Online] Available at: http://competitionlawblog.kluwercompetitionlaw.com/2021/03/28/revisiting-ftcs-2013-google-decision/ [Accessed 4 August 2022]
[72] LANCIERI, *Digital Protectionism? Antitrust, data protection, and the EU/US transatlantic rift,* in 7 *Journal of Antitrust Enforcement* 27-53 (2019)
[73] Ibidem
[74] AKMAN, *The Theory of Abuse in Google Search*
[75] Federal Trade Commission, *Statement Regarding Google's Search Practices In the Matter of Google Inc*, FTC File Number 111-0163, 2, 2013 [Online] Available at: https://www.ftc.gov/system/files/documents/public_statements/295971/130103googlesearchstmtofcomm.pdf [Accessed 4 August 2022]
[76] AKMAN, *The Theory of Abuse in Google Search*
[77] MANNE and WRIGHT, *Google and the limits of antitrust*
[78] LANCIERI, *Digital Protectionism?*

A similar outcome had also followed a private enforcement initiative, KinderStart LLC v Google Inc[79]. KinderStart, a vertical search website for kids' products and services, filed a private claim against Google for a violation of Sherman Act Section 2, arguing that Google manipulated its result page rank algorithm to demote KinderStart's search rank voluntarily, thus decreasing its website traffic and leading to losses in both commercial and advertisement revenue[80]. An outdated aspect of the Court's decision concerned the market definition. It was held that the search engine market could not constitute a relevant market for antitrust purposes because of the services provided free of cost, falling outside of antitrust law's scope.[81] While it is now pacific that a market in which a service is provided at zero-price in digital markets, in particular when it is part of a two-sided platform, can constitute a relevant market, what can still now be relevant is the argumentation about the possibility of considering the conduct abusive. The Court held that Google had no duty to its competitors and was under no obligation to aid a potential rival or to deal with other companies[82]. Google's action to promote its own product, returning its vertical search engine results at the top of the search results page, necessarily lowering the ranking of other non-Google websites, was considered legitimate competition on the merits. Merely promoting one's own product, even if it may have a negative business effect on one's competitors, does not itself make the practice anticompetitive[83]. The Court also held that Google would not have a specific intent to monopolise, as KinderStart did not prove that it competed with Google and that even if KinderStart were removed from the market, that would not be an injury that antitrust laws are trying to prevent unless the company can prove that this removal harms consumer welfare. Therefore, the lawsuit was dismissed.

The US Google Case proves that a different approach to antitrust policy, particularly to the abusive conduct of dominant economic operators in digital markets, can lead to entirely different outcomes and a different interpretation, even regarding the effects and the capability of harming consumers, of similar conduct from the same subject. It also explains why the legislative reform described in Chapter 2 would be so revolutionary for the US antitrust framework.

4. A glimpse into the future of the Google Shopping Case under the DMA

[79] US District Court for the Northern District of California, Decision of 16 March 2007, *Kinderstart.com, LLC v. Google, Inc*. - Case No. C 06-2057 JF (RS)
[80] LANCIERI, *Digital Protectionism?*
[81] WOAN, *Searching for an Answer: Can Google Legally Manipulate Search Engine Results?,* in 16(1) *U. Pa. J. Bus. L.* 294-332 (2013)
[82] *Kinderstart.com, LLC v. Google, Inc*
[83] WOAN, *Searching for an Answer*

This paragraph only offers a hypothetical application of the Digital Market Act (DMA)[84] to the facts of the Google Shopping Case to demonstrate how the regulation proposal's rules would have significantly simplified the Commission's job of assessing conduct from a dominant undertaking in digital markets.
The first significant difference is that, providing DMA ex-ante provisions, the obligations would apply before the conduct is even implemented, but would require a previous gatekeeper designation.
To determine whether Alphabet is susceptible to the designation, it must preliminarily be verified that it provides a core platform service among those mentioned under Article 2(2) DMA. Alphabet offers every core platform service within the meaning of Article 2 DMA, but concerning the Google Shopping case facts, it provides online intermediation services, online search engines and advertising services[85].

Once it has been verified that the undertaking provides a core platform service, the Commission may assess the Article 3 criteria. The quantitative criteria should be analysed first, as they provide a presumption for the qualitative criteria to be met. As for the first criterion, which requires the undertaking to have achieved an annual Union turnover equal to or above € 7,5 billion in each of the previous financial years, it may be complicated to carry on the assessment, as Alphabet publicly offers the data aggregated for Europe, the Middle East and Africa (EMEA), which accounts for around 30% of Google's total annual global revenue (*i.e.* € 50 billion in 2019, € 55 billion in 2020, € 79 billion). The Commission could achieve this information directly from Alphabet, which is required to make the initial assessment. For the purposes of this paragraph, it is possible to use the second option offered by Article 3(2)(a), which requires the undertaking to have an average market capitalisation of at least €75 billion in the previous year and to provide the same core platform service

[84] European Commission, *Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act) 2020/0374 (COD),* 2020. Version of the 11 May 2022.
[85] Under Article 2(2) of DMA, 'Core platform service' means any of the following:
(a) online intermediation services: according to Article 2 of the Regulation (EU) 2019/1150, they are services which constitute information society services, and that allow business users to offer goods or services to consumers to facilitate the initiating of direct transactions between those business users and consumers, irrespective of where those transactions are ultimately concluded. They must be provided to business users based on a contractual relationship between providers and business users. Both marketplaces and comparison-shopping services seem to be included in this category. Thus, Alphabet provides this core platform service through Google Shopping;
(b) online search engines: provided through Google Search;
(c) online social networking services: provided through Messenger by Google, Google Hangouts, Google +;
(d) video-sharing platform services: provided through YouTube;
(e) number-independent interpersonal communication services: defined under the European Electronic Communications Code Art.2(no.7), provided through Gmail
(f) operating systems: provided through Android;
(g) web browser: provided through Google Chrome;
(h) virtual assistants: provided through Google Assistant;
(i) cloud computing services: provided through Google Cloud Platform;
(j) online advertising services, including any advertising networks, advertising exchanges and any other advertising intermediation services, provided by a provider of any of the core platform services listed in points (a) to (g): provided through Google Ads;

in at least three Member States. Alphabet's capitalisation, in the last financial year, amounted to $1.5 trillion and offers its general search service, its shopping comparison service and its advertising service in more than three Member States[86]. The significant impact on the internal market is then presumed and, considering the undertaking's significance and the massive diffusion of its services, it would be difficult to conclude otherwise. Regarding the second quantitative criteria, the data are also in Google's hands. However, with a market share of 92% in Europe in July 2022, it should be consequential that Google has more than 45 million active users, considering that 90% of the individuals in the EU use the internet and the EU population is of around 448 million inhabitants[87]. We can then presume that around 350 million end users monthly use Google Search as their general search service. There is no data available for business users. Assuming that there are more than 10 thousand monthly active business users, Google would reach the threshold of Article 3(2)(b) and would therefore lead to the presumption of being an important gateway for business users to reach end users. The Commission in its decision has demonstrated the same concept for the comparison-shopping services, which are business users, showing how the traffic diverted by the conduct accounted for a large proportion of traffic to competing comparison shopping services and could not be effectively replaced by other sources currently available to them[88]. Google's position has been stable in the last three years, with a higher market capitalisation than required and with steady market shares that have never gone under 91.8%. Therefore, the requirement of Article 3(2)(c) would be fulfilled as well.

Once Google's gatekeeper designation is completed, the obligations and prohibitions under Article 5 and 6 DMA would directly apply.

The Prohibitions under Article 6 (d) DMA imposes gatekeepers to "*refrain from treating more favourably in ranking services and products offered by the gatekeeper itself or by any third party belonging to the same undertaking compared to similar services or products of third party and apply fair and non-discriminatory conditions to such ranking*". The prohibition addresses precisely the same conduct considered in the Google Shopping Case.

In practice, once the gatekeeper designation has been done, Google would not be allowed anymore to continue such conduct without the need for the Commission to define the relevant market, assess Google's dominance and prove the potentially harmful effects of the behaviour in question.

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[86] see *supra* note 2

[87] StatCounter, *Search Engine Market Share Europe*, 2022 [Online] Available at: https://gs.statcounter.com/search-engine-market-share/all/europe/#monthly-201901-202208 [Accessed 6 August 2022]
Eurostat, *Individuals – internet use*, 2022 [Online] Available at: https://ec.europa-eu/eurostat/databrowser/view/ISOC_CI_IFP_IU__custom_3176952/default/table?lang=en [Accessed 6 August 2022]

[88] Commission Decision, para. 591-598

This example explains why the DMA will bring a more straightforward and efficient enforcement approach toward the conduct, considered dangerous for competition and consumers, of the most critical undertakings operating in digital markets.

Conclusions

Digital markets represent a reality that may create several issues in enforcing the abuse of dominant position rules. The general prohibition under Art. 102 TFEU immediately applies to the conduct of dominant undertakings in digital markets. In fact, by providing an open clause, Art. 102 TFEU allows the inclusion of any conduct having the capacity to produce anticompetitive effects, comprising new conduct never enforced before. However, the application framework requires some adjustments. In fact, the role and value of information, economies of scale, network effects and the multi-sided nature of the platforms cause a high level of concentration in a context where the traditional analysis steps cannot be readily applied.

The first main problem concerns the relevant market definition, which is the preliminary step to the entire assessment. Considering the product substitutability, the rules established in the Commission Notice on Market Definition focus on the price dimension, considering the consumers' predicted behaviour in response to a small but significant price increase. In digital market, though, services are often offered at zero price, in exchange for the information provided by the users, which is at the base of many business models, or for the mere presence of the user, which may still create value thanks to the network effects. Additionally, the multi-sided nature of many platforms requires an evaluation of the overall effects and may require a joint price assessment. A case-by-case approach is required to assess if the two or multiple sides of the platform should be considered as a single or several relevant markets. The problem may be addressed by resorting to different analysis tools already used in other contexts, as a definition of the market based on the characteristics and functionalities of the product. Despite using more suitable tools, the burden on the antitrust authorities is still heavy.

Similar problems affect the definition of dominance. The background aspect of considering the competitive pressure is still valid, as the two main elements usually considered to determine the market power of the undertaking, namely market shares and barriers to entry. However, the complex structure of the multi-sided market platforms causes a significant difficulty in assessing the markets shares, especially when a service is offered at zero-price on one side and the actual financial value is created on the other side. Therefore, new proxies such as network effects, the possibility of multi-homing and switching costs for users can be

considered. The undertaking's access to data relevant for competition and the competitive pressure driven by innovation may be included as well in the assessment of market power.
At the same time, the new conducts in digital market, like self-preferencing or refusal to supply data, do not have established legal tests to support the authorities in the assessment. This requires an adaptation of the already existing theories of harm which, however, can only be partial. The absence of reliable legal tests results in a weakened certainty for the undertakings, which may not be sure whether the conduct they are engaging will lead them to incur in a fine for a competition infringement. In fast-moving markets like the digital ones, where innovation is a crucial aspect, this may cause undertakings to implement more conservative choices, to the detriment of consumers.

Most of these shortcomings are addressed, at least for major operators, by many legislative reform proposals, submitted or in the process of implementation, in several different legal systems.
The most structured reform is for sure the Digital Market Act in the EU, which aims to offer a comprehensive regulatory framework for the most important operators offering services in the main digital services. The DMA provides an *ex-ante* regulation establishing precise prohibition and obligation for all those undertakings which have undergone the prior gatekeeper designation, which replaces both the relevant market definition and the dominance assessment. The designation process is carried by considering both qualitative and quantitative criteria and provides the European Commission with a simplified procedure based on presumptions.
The result is a more agile process which will enhance for sure the Commission's enforcement ability in the sector.

If in the EU the DMA may be considered as a natural evolution of the regulatory and enforcement tradition of the abuse of dominant position, the same cannot be said, for different reasons, for the USA and China.
US Sherman Act prohibits monopolisation, which already represents a higher standard compared to the European abuse of dominant position. Additionally, the US judiciary tradition, which draws its theoretical basis from the Chicago School of economics, has always been keen on non-intervention regarding unilateral behaviours, since it was believed that they could not be viable methods to increase one's monopoly power. In this context, which allowed the bursting expansion of the most important digital markets' operators, like Google, Amazon and Meta, the legislative reform would represent a paradigm shift. The several proposed Bills would offer the enforcement authorities innovative tools to assess conduct which are currently freely engaged by the digital markets' operators.

The Chinese legal system offers an even different perspective. Due to the recent implementation of market economy, competition policy is still at an early stage. The enforcement towards digital markets' operators is

even more recent, as the Internet industry has been only last year deemed mature enough to not be eligible any more to the accommodating and prudential strategy of the Chinese Government for new industries and business models. The response, however, has been extremely resolute. Thanks to the Antitrust Guidelines on the Platform economy, the Chinese legal system rapidly provided its competition authorities with proper tools in consideration of the characteristics of digital markets, allowing a speedy and efficient action, which is however offset by fewer guarantees offered to the operators under assessment.
What can be concluded, by all means, is that the different systems are converging towards the European model, seeking greater control over the conduct of digital market players.

The present state and future development of the competition policy regarding the abuse of dominant position in digital markets is perfectly exposed in the Google Shopping case. This case has been one of the first to properly assess, in Europe and in the US, a conduct which has never been considered abusive in the traditional markets but that creates concerns in the digital context, as self-preferencing, which is the allegedly abusive conduct held by Google, was never evaluated before as a competition rules infringement. The same conduct was evaluated with opposite results by the EU Commission and by the US Federal Trade Commission. The Commission decision shows the possibility to use the current tools in the digital markets' context. The relevant market was defined on grounds unrelated to the price dimension. The Commission tailored the market boundaries to the service functionalities, considering its activities, purposes and characteristics. The potential problem, though, is that a set of rules which can be extended as much as the authority wants, while being a solution for the underenforcement risk, creates the potential threat of an indiscriminate power of the authority in the market definition.
In a similar way, the dominance assessment discarded any reference to sales, but considered the markets shares by value and emphasised the barriers to entry, represented by the specific characteristics of digital markets. The Commission's conclusion has been upheld by the Tribunal of the EU, which dismissed Google's complaints. In particular, the Tribunal found that Google did not demonstrate efficiency gains.
Conversely, the efficiency rationale was the reason that induced the FTC to not file a case against Google, as the conduct was considered a natural consequence of the search engine business model, arguing that the conduct was objectively necessary and generated efficiencies.

These differences are likely to fall short if all reform proposal were to be implemented, as the resulting framework would be rather uniform, directly prohibiting the self-preferencing conduct of the dominant operator and not leaving much space to authorities' or judges' discretion. What can be in fact be appreciated of the new possible regulatory frameworks is the certainty, together with the speed of intervention they offer. Switching form an ex-post to an *ex-ante* regime would presumably set precise rules that the economic

operators know they must comply to and that should allow an immediate response from the competition authorities.

Of course, it is not possible to predict if the legislative reform will be implemented and what their actual application will be in the future. However, the chosen direction is clear, and it moves toward greater intervention against the abusive conduct of dominant operators in digital markets.
Meanwhile, in the EU, the abuse of dominant position rules under Article 102 TFEU continue to offer protection for competition, despite the application issues that may arise.

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