



MARKET DEFINITION AS AN INSTRUMENT IN EUROPEAN UNION COMPETITION LAW

Avrupa Birliđi Rekabet Hukukunda Bir Araç Olarak Pazar Tanımı

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Abstract

Market definition has long occupied a central position in EU competition law as the primary analytical framework for assessing market power and competitive constraints. By delineating the boundaries within which firms operate, it provides a structured basis for evaluating dominance and anti-competitive conduct. However, the increasing prevalence of multi-sided platforms and digital business models has exposed significant limitations in the traditional application of market definition. In particular, the growing importance of zero-price services, indirect network effects, and non-price dimensions of competition challenges the reliance on price-based tools such as the SSNIP test and the assumption of clearly defined market boundaries. This article argues that while market definition remains an indispensable component of EU competition law, its role should be reconsidered in light of contemporary market realities. Rather than treating market definition as a rigid and determinative step, it should be understood as an instrumental and context-dependent analytical tool. Building on an examination of the conceptual foundations and evidentiary framework of market definition, the article highlights its inherent limitations. These include its sensitivity to interpretative choices, its dependence on imperfect data, and its difficulty in capturing dynamic and interdependent market relationships. The analysis further demonstrates that these limitations become particularly pronounced in digital and multi-sided markets, where competitive interactions are shaped by complex ecosystem effects and innovation-driven competition. In response, the article advocates for a more flexible and effects-based approach that places greater emphasis on the direct assessment of competitive constraints and market dynamics. Such an approach does not abandon market definition, but rather situates it within a broader analytical framework, ensuring that it supports, rather than determines, the outcome of competition law analysis. In this way, the article contributes to ongoing debates on the evolution of EU competition law in the digital economy.

Keywords: Market definition, EU competition law, Digital markets, Multi-sided platforms, Effects-based analysis

Öz

Pazar tanımı, Avrupa Birliđi rekabet hukukunda uzun süredir piyasa gücünün ve rekabetçi kısıtların değerlendirilmesinde başlıca analitik çerçeve olarak merkezi bir konuma sahiptir. Teşebbüslerin faaliyet gösterdiđi sınırları belirleyerek hâkim durumun ve rekabeti kısıtlayıcı davranışların incelenmesi için yapısal bir temel sunar. Bununla birlikte, çok taraflı platformların ve dijital iş modellerinin giderek yaygınlaşması, pazar tanımının geleneksel uygulamasına ilişkin önemli sınırlılıkları ortaya çıkarmıştır. Özellikle sıfır fiyatlı hizmetlerin artan önemi, dolaylı ağ etkileri ve fiyat dışı rekabet parametrelerinin belirleyici hâle gelmesi, SSNIP testi gibi fiyat temelli araçlara ve açık biçimde çizilmiş pazar sınırlarına dayanan yaklaşımın sorgulanmasına yol açmaktadır. Bu makale, pazar tanımının AB rekabet hukuku bakımından vazgeçilmez bir araç olmaya devam ettiđini, ancak rolünün güncel piyasa gerçeklikleri ışığında yeniden değerlendirilmesi gerektiđini ileri sürmektedir. Pazar tanımının katı ve belirleyici bir aşama olarak ele alınması yerine, araçsal ve bağlama duyarlı bir analitik unsur olarak anlaşılması gerektiđi savunulmaktadır. Bu doğrultuda, pazar tanımının kavramsal temelleri ve delil yapısı incelenmekte; yorum farklılıklarına açıklığı, veri sınırlılıklarına bağımlılığı ve dinamik ile karşılıklı bağımlı piyasa ilişkilerini yansıtmadaki yetersizliđi gibi içsel sınırlılıkları ortaya konulmaktadır. Analiz ayrıca, söz konusu sınırlılıkların özellikle dijital ve çok taraflı piyasalarda daha belirgin hâle geldiđini göstermektedir. Bu piyasalarda rekabetçi etkileşimler, karmaşık ekosistem yapıları ve yenilik odaklı rekabet dinamikleri tarafından şekillendirilmektedir. Bu çerçevede makale, rekabetçi kısıtların ve piyasa dinamiklerinin doğrudan değerlendirilmesine daha fazla ağırlık veren esnek ve etki temelli bir yaklaşımı savunmaktadır. Bu yaklaşım, pazar tanımını tamamen dışlamamakta; aksine onu daha geniş bir analitik çerçeve içine yerleştirerek sonuç belirleyici deđil, destekleyici bir rol üstlenmesini sağlamaktadır. Bu yönüyle çalışma, dijital ekonomi bağlamında AB rekabet hukukunun evrimine ilişkin tartışmalara katkı sunmaktadır.

Anahtar Kelimeler: Pazar tanımı, AB rekabet hukuku, Dijital piyasalar, Çok taraflı platformlar, Etki temelli analiz

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INTRODUCTION

Market definition has traditionally occupied a central place in EU competition law as the primary analytical framework for assessing market power and competitive constraints. By identifying the boundaries within which firms operate, it provides the foundation for evaluating dominance, anti-competitive conduct, and the potential effects of market behaviour. The European Commission and the EU Courts have consistently relied on market definition as a starting point for competition analysis, supported by established tools such as demand and supply substitutability, as well as the hypothetical monopolist (SSNIP) test (Whish & Bailey, 2018). In this sense, market definition does not merely serve as a preliminary step, but operates as a central organising device that structures the overall assessment of competition law cases. This central role is closely linked to the function of market definition in translating complex economic realities into a legally manageable framework. By delineating a relevant market, competition authorities are able to identify competitive constraints, assess market shares, and evaluate the existence of dominance in a systematic and structured manner. This simplifying function has contributed significantly to the coherence and predictability of EU competition law. At the same time, however, it necessarily involves a degree of abstraction, as it requires the imposition of clear boundaries on markets that are often fluid, overlapping, and continuously evolving.

However, the increasing prevalence of multi-sided platforms and digital business models has placed significant pressure on the traditional framework of market definition. In particular, the growing importance of zero-price services, indirect network effects, and competition driven by innovation rather than price challenges the applicability of conventional tools. Digital markets are often characterised by complex interdependencies between different groups of users, as well as by business models that monetise data, attention, or ecosystem participation rather than direct monetary payments. These features complicate the identification of substitutable products and undermine the relevance of price-based analytical techniques (Ezrachi & Stucke, 2016). In this context, the reliance on tools such as the SSNIP test becomes increasingly problematic. While the test is designed to assess substitutability through hypothetical price increases, its application is difficult in markets where prices are set at zero or where competitive interactions are shaped by non-price factors. Similarly, the emphasis on clearly delineated market boundaries may fail to capture overlapping and dynamic competitive relationships, particularly in platform-based ecosystems. As a result, traditional market definition risks producing outcomes that do not fully reflect the actual dynamics of competition in digital environments.

Against this background, this article contends that while market definition remains an essential analytical tool in EU competition law, its traditional application is increasingly insufficient in the context of multi-sided and digital markets. Rather than abandoning market definition altogether, competition analysis should adopt a more flexible and effects-based approach that complements, rather than replaces, the conventional framework. This requires recognising the instrumental nature of market definition and situating it within a broader analytical perspective that places greater emphasis on actual competitive constraints and market dynamics. To develop this argument, the article proceeds in several steps. It first examines the role and purpose of market definition in EU competition law, highlighting its function in structuring the assessment of market power. It then analyses the guiding principles and evidentiary tools used in defining the relevant market, emphasising both their analytical strengths and their inherent limitations. Building on this foundation, the article explores the conceptual and practical constraints of market definition as an analytical tool. Finally, it considers the specific challenges posed by multi-sided platforms and the digital economy, demonstrating how these developments necessitate a more flexible and context-sensitive approach. Through this analysis, the article contributes to the broader debate on the evolving role of market definition in contemporary competition law.

THE ROLE AND PURPOSE OF MARKET DEFINITION IN EU COMPETITION LAW

Market definition has long been regarded as a central analytical step in EU competition law, primarily because of its close connection with the assessment of market power. As competition law enforcement largely revolves around identifying and constraining market power, defining the relevant market becomes a necessary preliminary exercise in many cases (Blanco, 2011). Market power is generally understood as the ability of an undertaking to raise prices above competitive levels, at least in the short run above marginal cost and, in the long run, above average total cost (Carlton & Perloff, 2004). While alternative conceptualisations of market power exist, this economic understanding has been widely accepted in both academic literature and EU competition practice (Bishop & Walker, 2010; Monti, 2007). The assessment of market power plays a crucial role in the application of key competition law instruments, including Article 102 TFEU (2012), the Merger Regulation (2004), and the De Minimis Notice (2014).

In practice, market power may be assessed through both direct and indirect methods (Motta, 2004). Direct methods rely on economic measurements such as price-cost margins, profitability analysis, and elasticity estimates (Geradin, Layne-Farrar, & Petit, 2012). However, these methods often face significant practical and informational constraints, limiting their applicability in real-world enforcement. As a result, EU competition authorities and Courts have predominantly

relied on indirect methods (Case 6/72, *Continental Can*, 1973). The indirect method operates through a two-stage framework. First, the relevant market is defined by identifying the set of products and geographic areas that exert competitive constraints on the undertaking in question. Second, within this defined market, market shares and additional factors—such as barriers to entry, buyer power, and market structure—are evaluated to assess the existence and extent of market power. In this sense, market definition serves as the analytical bridge between abstract economic theory and concrete legal assessment. It translates complex economic realities into a structured legal framework that can be applied consistently by competition authorities and Courts (Whish & Bailey, 2018).

At this point, it is important to note that market definition reflects a hybrid concept, situated at the intersection of law and economics. While its foundations lie in economic theory—particularly in the notion of substitutability—it is ultimately operationalised within a legal framework that requires clarity, predictability, and administrability (Faull, Nikpay, & Taylor, 2014). This dual character explains both the strength and the limitations of market definition: it provides a structured and manageable tool for legal analysis, but at the cost of simplifying complex market dynamics.

The concept of the relevant market itself is based on the notion of substitutability (Faull et al., 2014). The purpose of market definition is to identify the products and geographic areas that are sufficiently interchangeable from the perspective of consumers. Where consumers can switch to alternative products or suppliers in response to a price increase or other changes, those alternatives are considered part of the same relevant market (Faull et al., 2014). This approach reflects the idea that competitive constraints arise from substitutable products and locations. Traditionally, the relevant market is divided into two dimensions: the relevant product market and the relevant geographic market (Commission Notice on the Definition of the Relevant Market, 1997) (hereinafter “Market Definition Notice”). The relevant product market includes all products or services that are regarded as interchangeable by consumers in terms of their characteristics, price, and intended use. EU case law has repeatedly emphasised the importance of these factors in determining substitutability (Case 85/76, *Hoffmann-La Roche*, 1979). At the same time, the relevant geographic market encompasses the area in which the conditions of competition are sufficiently homogeneous, allowing undertakings to compete on comparable terms (Case 27/76, *United Brands*, 1978).

Market definition also plays a crucial role in structuring the assessment of market shares, which often serve as a proxy for market power in EU competition law. Although market shares are not determinative on their own, they provide an initial indication of the competitive position of an undertaking within the relevant market. This further reinforces the importance of defining the market accurately, as overly narrow or overly broad market definitions may lead to distorted conclusions regarding dominance and competitive effects.

Despite its central role, market definition is not an end in itself (Bishop & Walker, 2010). Rather, it is a tool designed to facilitate the assessment of competitive constraints and market power. As the EU Courts have recognised, the definition of the relevant market must ultimately serve the broader objective of competition analysis (Case 6/72, *Continental Can*, 1973). Accordingly, an overly rigid or formalistic approach to market definition risks obscuring, rather than clarifying, the actual competitive dynamics of a given market. This instrumental nature of market definition becomes particularly important when assessing its limitations, especially in complex market environments such as multi-sided platforms and digital markets.

THE ANALYTICAL FRAMEWORK OF MARKET DEFINITION: PRINCIPLES AND EVIDENCE

The process of market definition in EU competition law is structured around the identification of competitive constraints. As set out in the Commission’s Notice on the Definition of the Relevant Market, these constraints are primarily examined through the concepts of demand substitutability, supply substitutability, and, to a more limited extent, potential competition (Market Definition Notice, 1997). Together, these elements form the analytical framework through which the boundaries of the relevant market are determined. While this framework provides a structured methodology, its application is inherently context-dependent, requiring the careful evaluation of both qualitative and quantitative evidence.

Demand substitutability constitutes the most immediate and significant competitive constraint in market definition (Case T-321/05, *AstraZeneca v Commission*, 2010). It focuses on the ability of consumers to switch from one product to another in response to changes in price or other competitive parameters (Market Definition Notice, 1997, para 15). In this sense, demand substitutability reflects the core economic intuition underlying market definition: products belong to the same market if they exert sufficient competitive pressure on each other (Case T-177/04, *easyJet v Commission*, 2006). The assessment is inherently contextual, taking into account factors such as price, quality, consumer preferences, and intended use. Importantly, substitutability does not require perfect interchangeability; rather, it is sufficient that a significant proportion of consumers would consider switching in response to a small but significant non-transitory increase in price. This approach also recognises that substitution patterns may be asymmetric and heterogeneous across

different consumer groups. For instance, while a higher-quality product may substitute a lower-quality one, the reverse may not necessarily hold (Case T-201/04, *Microsoft v Commission*, 2007). Similarly, marginal consumers—those who are most responsive to price changes—play a decisive role in shaping the outcome of the analysis, even if a substantial portion of consumers remain insensitive to price variations. Accordingly, market definition does not aim to capture the behaviour of all consumers, but rather focuses on those whose switching decisions exert competitive pressure on suppliers.

Supply substitutability, by contrast, focuses on the ability of producers to switch production between products in the short term without incurring significant additional costs or risks (Market Definition Notice, 1997, para 20). Where such switching is feasible, suppliers may impose competitive constraints even if they are not currently active in the market. However, EU competition law adopts a relatively cautious approach to supply substitutability. It is only taken into account at the market definition stage where the adjustment can occur rapidly and without substantial investment (Case T-51/89, *Tetra Pak Rausing v Commission*, 1990). Otherwise, it is considered as part of the broader assessment of potential competition (*Volvo/Scania*, 2000). This distinction reflects the need to maintain analytical clarity while avoiding an overly expansive definition of the relevant market (Niels, Jenkins, & Kavanagh, 2016).

Potential competition constitutes a further, but more indirect, source of competitive constraint. It includes factors such as barriers to entry, buyer power, and the likelihood of new entry into the market (Baker, 2007). Unlike demand and supply substitutability, potential competition is generally not incorporated directly into the definition of the relevant market. Instead, it is assessed at a later stage in the analysis of market power (Whish & Bailey, 2018). This separation illustrates the structured nature of EU competition law, where market definition serves as an initial screening mechanism rather than a comprehensive assessment of all competitive forces. At the same time, this separation may also create tensions, as certain competitive constraints that are highly relevant in practice are formally excluded from the market definition stage (Market Definition Notice, 1997, para 24).

A key tool used in operationalising demand substitutability is the hypothetical monopolist test, commonly referred to as the SSNIP test (Werden, 2003). This test examines whether a hypothetical monopolist could profitably impose a small but significant non-transitory increase in price, typically in the range of 5–10 per cent (Market Definition Notice, 1997, para 17). If consumers would switch to alternative products or suppliers in response to such a price increase, those alternatives are included within the same relevant market. The test is applied iteratively, expanding the candidate market until a price increase becomes profitable. In this way, the SSNIP test provides a structured method for identifying the smallest set of products or areas over which a hypothetical monopolist could exercise market power (Case T-699/14, *Topps Europe v Commission*, 2017). The logic of the SSNIP test is closely tied to the behaviour of marginal consumers. Even if a large proportion of consumers remain loyal to a product, the presence of a sufficiently large group of price-sensitive consumers may render a price increase unprofitable. In this respect, the test captures the competitive constraint exerted by substitution at the margin, rather than average consumer behaviour. However, the practical application of the test often faces significant challenges. Reliable data on costs, prices, and demand elasticities may not be readily available, particularly in complex or rapidly evolving markets (Case T-699/14, *Topps Europe v Commission*, 2017). Moreover, the results of the test may be distorted where the prevailing price is already above the competitive level, giving rise to the well-known cellophane fallacy. For these reasons, EU competition authorities do not treat the SSNIP test as a mandatory or exclusive tool, but rather as one of several methods that may be used depending on the circumstances of the case. The Commission retains a significant degree of discretion in deciding whether and how to apply the test, and there is no strict hierarchy among the various analytical tools available (Case T-699/14, *Topps Europe v Commission*, 2017). While this flexibility allows for a more context-sensitive assessment, it also increases the scope for interpretative variation and may reduce the predictability of market definition outcomes (Geradin et al., 2012).

Alongside these conceptual tools, market definition relies on a broad range of evidentiary sources. The Commission typically begins with qualitative indicators such as product characteristics, intended use, and price levels to identify potential substitutes (Market Definition Notice, 1997, para 36). While these criteria provide a useful starting point, they are not sufficient on their own, as they may lead to overly narrow or artificial market definitions. This limitation is particularly evident in cases where different products share similar characteristics but are not regarded as substitutes by consumers, or where consumer preferences vary significantly across different groups (Case 27/76, *United Brands*, 1978; Case T-301/04, *Clearstream v Commission*, 2009).

Empirical evidence of past substitution patterns plays a particularly important role in complementing these qualitative indicators (Market Definition Notice, 1997, para 38). Data on how consumers have responded to price changes, market shocks, or changes in product availability can provide valuable insights into actual substitution behaviour. Such evidence may include diversion ratios, switching patterns, and historical pricing data across different regions (Market Definition Notice, 1997, para 45). Similarly, quantitative techniques such as price correlation analysis, elasticity estimates, and

econometric modelling may be used where sufficient data is available (Bergh & Camesasca, 2006). However, these methods are not without limitations, as they may be sensitive to data quality, model assumptions, and the specific time period under consideration.

In addition to quantitative and historical evidence, the Commission frequently relies on market participants as sources of information. The views of customers and competitors, as well as internal business documents, may provide important insights into substitution patterns and competitive dynamics (Market Definition Notice, 1997, para 41). At the same time, such evidence must be treated with caution, as it may be influenced by strategic considerations or subjective perceptions. Accordingly, the assessment of evidence requires a careful balancing exercise, taking into account both its probative value and its potential biases.

Further factors such as barriers to switching, regulatory constraints, transport costs, and the existence of distinct customer groups may also play a significant role in shaping the scope of the relevant market (Market Definition Notice, 1997, para 42). For instance, switching costs may prevent consumers from moving between otherwise substitutable products, thereby narrowing the effective market. Similarly, regulatory barriers or trade restrictions may limit the geographic scope of competition, even where products are otherwise interchangeable. In certain cases, the existence of distinct customer groups may justify the identification of separate sub-markets, particularly where price discrimination is feasible, and arbitrage is limited (Market Definition Notice, 1997, para 50).

Taken together, these principles and evidentiary tools demonstrate that market definition in EU competition law is not a mechanical exercise, but a context-dependent and multifaceted process. While the framework provides a structured methodology, its application requires a significant degree of judgment and interpretative flexibility (Bailey & John, 2018). This inherent flexibility, while necessary, also reveals the potential fragility of market definition as an analytical tool. As the following section will demonstrate, these limitations become even more pronounced in complex market environments such as multi-sided platforms and digital markets, where traditional assumptions about price, substitutability, and market boundaries are increasingly challenged.

THE LIMITS OF MARKET DEFINITION AS AN ANALYTICAL TOOL

Despite its central role in EU competition law, market definition is subject to a number of conceptual and practical limitations that may reduce its reliability as an analytical tool. While the framework provides a structured methodology for identifying competitive constraints, its application may lead to distortions or incomplete assessments, particularly in complex or dynamic market environments. These limitations arise both from the simplifying assumptions underlying market definition and from the practical difficulties associated with its implementation.

One important limitation stems from the existence of substitution patterns that are not easily captured within a clearly defined market boundary. The concept of chains of substitution illustrates this difficulty (Market Definition Notice, 1997, para 42). In certain markets, products that are not directly substitutable may nonetheless be connected through a series of intermediate substitutes, forming a chain of competitive constraints. In such cases, the boundaries of the relevant market become inherently blurred. While adjacent products may exert competitive pressure on each other, the products at the ends of the chain may not be substitutable at all, raising questions as to whether they should be included within the same market (Bailey & John, 2018). This phenomenon demonstrates that market definition, by imposing discrete boundaries, may oversimplify a continuum of competitive relationships. Moreover, chains of substitution highlight a deeper methodological problem: market definition requires the identification of a clear “cut-off point” in a setting where competitive constraints often exist along a spectrum. The decision as to where this boundary should be drawn is not purely objective, but involves a degree of judgment. As a result, different interpretations of the same substitution patterns may lead to different market definitions, thereby affecting the outcome of the analysis. This reinforces the idea that market definition is not merely a descriptive exercise, but one that involves implicit evaluative choices (Faull et al., 2014).

A further limitation arises in the context of aftermarket and system markets. In many industries, the use of a primary product is closely linked to the consumption of secondary products, such as spare parts or consumables. The relationship between these products raises complex questions as to whether they should be treated as part of a single system market or as separate markets (Niels et al., 2016). While the assessment depends on factors such as consumer behaviour and the relative importance of secondary products in purchasing decisions, the distinction is not always clear-cut (Market Definition Notice, 1997, para 56). As illustrated in cases such as Hilti, an overly narrow or overly broad market definition may significantly affect the outcome of the analysis. This highlights the sensitivity of market definition to underlying assumptions regarding consumer behaviour and market structure (Case T-30/89, Hilti v Commission, 1991).

The application of the hypothetical monopolist test is also subject to important limitations. One of the most well-known problems is the cellophane fallacy, which arises when the test is applied using a price that is already above the competitive level (United States v Du Pont, 1956). In such cases, the analysis may incorrectly suggest that a firm faces significant competitive constraints, as consumers may switch to alternative products in response to a further price increase. However, this switching behaviour does not necessarily indicate the absence of market power, but rather reflects the fact that the firm is already pricing at a monopoly level (MasterCard, 2007). As a result, the SSNIP test may lead to an overly broad market definition, thereby underestimating the true extent of market power. Beyond the cellophane fallacy, the SSNIP test also faces broader conceptual limitations. In particular, the test is fundamentally based on price as the main parameter of competition. This assumption may be appropriate in traditional markets, but it becomes increasingly problematic in environments where competition takes place along non-price dimensions, such as quality, innovation, data collection, or user experience. In such contexts, a price-based test may fail to capture the relevant competitive constraints, leading to an incomplete or distorted market definition (OECD, 2012). Furthermore, the practical application of the SSNIP test often depends on the availability of reliable data, which may not be present in many cases. Competition authorities frequently lack precise information on costs, demand elasticities, and consumer responses, especially in rapidly evolving or technologically complex markets. As a result, the test is often applied in a qualitative or hypothetical manner, which may reduce its analytical precision. This reinforces the view that the SSNIP test, while conceptually valuable, cannot be relied upon as a definitive or standalone tool (Crocioni, 2002).

The evidentiary framework underlying market definition also presents certain challenges. As noted above, there is no strict hierarchy among the various types of evidence used in defining the relevant market. While this flexibility allows competition authorities to adapt their analysis to the specific circumstances of each case, it also increases the scope for discretion. Different types of evidence may point to different market definitions, and the absence of a clear prioritisation framework may lead to inconsistent or unpredictable outcomes. In this respect, market definition may be influenced not only by objective market conditions, but also by the interpretative choices of the authority conducting the analysis. Additional limitations arise from the role of switching costs, regulatory barriers, and customer segmentation. Even where products are objectively substitutable, high switching costs may prevent consumers from changing suppliers, thereby weakening the competitive constraint that would otherwise exist. Similarly, regulatory restrictions or trade barriers may artificially limit the geographic scope of competition. The existence of distinct customer groups may further complicate the analysis, particularly where price discrimination is feasible and arbitrage is limited. In such cases, the identification of separate markets may depend on factors that are not directly related to product substitutability, but rather to market structure and strategic behaviour.

Taken together, these limitations highlight the inherent tension between the need for analytical clarity and the complexity of real-world markets. Market definition seeks to impose clear boundaries on what are often fluid and dynamic competitive relationships. While this simplification is necessary for legal analysis, it may also obscure important aspects of competition. In particular, an overly rigid or formalistic approach to market definition may divert attention from the actual sources of competitive pressure, leading to an incomplete or even misleading assessment. This tension becomes even more pronounced when considering the relationship between market definition and the broader assessment of competitive effects. While market definition is intended to serve as a preliminary step in the analysis, it may, in practice, shape the outcome of the entire assessment. An artificially narrow market definition may exaggerate the degree of market power, while an overly broad definition may dilute it. In this sense, market definition is not merely a neutral analytical tool, but a decisive factor that may influence the substantive outcome of competition law enforcement. From a broader perspective, this raises the question of whether market definition should continue to occupy a central role in competition analysis, or whether its function should be reconsidered. While it remains a useful organising framework, its limitations suggest that it should not be treated as an end in itself or as a rigid prerequisite for assessing competitive effects. Rather, greater emphasis should be placed on the direct evaluation of competitive constraints and market dynamics. This does not imply abandoning market definition, but rather integrating it within a more flexible and effects-based analytical approach. Accordingly, these limitations suggest that market definition should be applied with a degree of caution and flexibility. Rather than treating it as a rigid prerequisite, competition authorities should recognise its instrumental nature and focus on the underlying competitive constraints. As the next section will demonstrate, these concerns become even more pronounced in the context of multi-sided platforms and digital markets, where traditional assumptions about price, substitutability, and market boundaries are increasingly challenged.

MARKET DEFINITION IN MULTI-SIDED MARKETS AND THE DIGITAL ECONOMY

The limitations of market definition become particularly pronounced in the context of multi-sided markets and the digital economy. These markets challenge many of the assumptions underlying traditional competition analysis, particularly those related to price-based competition, clear market boundaries, and one-dimensional substitution patterns. As a

result, the application of conventional market definition tools in such environments raises significant conceptual and practical difficulties. In particular, the increasing complexity and interdependence of market interactions make it more difficult to identify a single set of products or services that meaningfully capture the relevant competitive constraints.

Multi-sided markets are characterised by the presence of two or more distinct groups of users who interact through a platform, with the value of the service depending on the participation of each group (Rochet & Tirole, 2003). These interactions give rise to indirect network effects, whereby an increase in users on one side of the market enhances the value of the platform for users on the other side (Rochet & Tirole, 2003). This interdependence complicates the analysis of substitutability, as competitive constraints cannot be assessed by examining each side of the market in isolation. Instead, it becomes necessary to consider the platform as a whole, taking into account the feedback loops between different user groups and the overall structure of incentives that sustain the platform. A key difficulty arises from the fact that pricing structures in multi-sided markets are often asymmetric. One side of the platform may be charged a positive price, while the other side may receive the service for free or even be subsidised (Filistrucchi et al., 2014). In such cases, the application of the SSNIP test becomes problematic, as it is unclear on which side of the market the price increase should be assessed. Applying the test to only one side may fail to capture the overall pricing structure of the platform, while applying it to the aggregate price may obscure the underlying economic logic of the business model. This challenge is particularly evident in non-transaction platforms, where interactions between users do not involve direct monetary exchanges, and where the concept of price itself becomes less meaningful as an analytical benchmark (Niels et al., 2016).

These issues are further amplified in the digital economy, where zero-price services are common and competition often takes place along non-price dimensions such as innovation, data collection, and quality of service (Ezrachi & Stucke, 2016). In such markets, the traditional reliance on price as the primary indicator of competitive constraints becomes increasingly inadequate (Gilbert & Sunshine, 1995). As illustrated in cases such as Google Search (Shopping), the fact that a service is offered free of charge does not imply the absence of competition or economic exchange (Google Search (Shopping), 2017). Instead, users may “pay” through the provision of personal data, attention, or engagement, which in turn generates value for the platform through advertising or other monetisation strategies. This transformation of the notion of “price” further complicates the application of price-based tests such as the SSNIP framework.

The Commission’s decisional practice reflects an awareness of these challenges. In cases such as MasterCard and Visa, the Commission has adopted a more nuanced approach to market definition by identifying multiple interrelated markets or by focusing on specific segments of the platform where competitive effects are most evident. For example, in the payment card industry, the Commission distinguished between upstream and downstream markets, as well as between issuing and acquiring sides (Morgan Stanley/Visa, 2007). This approach recognises the complexity of multi-sided interactions, but also illustrates the difficulty of fitting such markets into the traditional framework of discrete and clearly defined market boundaries. It also demonstrates that market definition in such contexts may require a degree of fragmentation in order to capture different layers of competitive interaction (MasterCard, 2007). Similarly, in the Google Android decision, the Commission departed from a strict application of the SSNIP test, acknowledging that a price-based analysis would not adequately capture the competitive dynamics of the relevant market (Google Android, 2018). Instead, the assessment focused on factors such as the licensing conditions of mobile operating systems, the role of ecosystem effects, and the importance of innovation. This shift indicates a move towards a more flexible and context-sensitive approach to market definition in digital markets, where the focus is placed less on formal boundaries and more on actual competitive constraints.

At a more general level, the increasing importance of innovation as a parameter of competition raises further questions regarding the adequacy of traditional market definition. In digital markets, firms often compete not only within existing product markets, but also for the development of new products, technologies, and business models. This dynamic form of competition is not easily captured within static market definitions. As a result, concepts such as “innovation markets” have been proposed in order to reflect competition over future products and technological trajectories (Tece & Coleman, 1998). However, the use of such concepts remains controversial, as it introduces additional uncertainty and raises questions about the appropriate scope of competition analysis.

The difficulties associated with market definition in digital markets also highlight a broader shift in the focus of competition analysis. Rather than relying exclusively on predefined market boundaries and market shares, there is an increasing emphasis on the direct assessment of competitive effects and strategic behaviour. This is reflected in the growing importance of theories of harm that focus on exclusionary strategies, leveraging, and ecosystem control, rather than on static measures of market power (European Commission, 2019). In this context, market definition may play a more limited or supportive role, rather than serving as the primary analytical starting point. This development is consistent with a broader movement in EU competition law towards a more effects-based approach. Nevertheless, it would be premature to conclude that market definition has become obsolete in the digital economy. Despite its

limitations, it continues to provide a useful framework for structuring competition analysis and ensuring legal certainty. In particular, it offers a common language through which competition authorities, courts, and market participants can articulate and assess competitive relationships. The challenge, therefore, is not to abandon market definition altogether, but to adapt its application to the specific characteristics of digital markets.

In this respect, the experience of EU competition law suggests an emerging shift towards a more effects-based and context-driven analysis. While the formal framework of market definition remains in place, its practical application has become increasingly pragmatic and adaptable (Jones, Sufrin, & Dunne, 2019). Competition authorities are more willing to rely on a combination of qualitative and quantitative evidence, to consider multiple overlapping markets, and to focus on the specific competitive constraints relevant to each case. This pragmatic evolution reflects an attempt to reconcile the need for analytical structure with the realities of complex market environments. Ultimately, the challenges posed by multi-sided platforms and the digital economy do not undermine the relevance of market definition as such, but rather expose its limitations as a rigid or self-contained analytical tool. These developments reinforce the argument that market definition should be understood as an instrument within a broader analytical framework, rather than as a definitive or decisive step in competition law analysis. In this sense, its role is best understood as supportive rather than determinative, particularly in markets characterised by rapid innovation, data-driven business models, and complex interdependencies.

CONCLUSIONS

This article has examined the role, analytical framework, and limitations of market definition in EU competition law, with particular emphasis on its application in multi-sided markets and the digital economy. Traditionally, market definition has functioned as a central organising tool, providing the basis for assessing market power and structuring competition analysis. Its conceptual foundations—rooted in substitutability, competitive constraints, and price-based methodologies—have ensured a degree of analytical clarity and legal certainty in enforcement practice. In this respect, market definition has long been regarded not merely as a technical step, but as an indispensable component of the overall analytical framework of EU competition law.

However, as the analysis throughout this article has demonstrated, these foundations are increasingly strained in contemporary market environments. The rise of multi-sided platforms, the widespread use of zero-price business models, and the growing importance of non-price parameters of competition—such as innovation, data accumulation, and quality—challenge the assumptions underlying traditional market definition. In such contexts, tools such as the SSNIP test, as well as the reliance on clearly delineated market boundaries, may fail to capture the actual dynamics of competition. As a result, market definition risks producing outcomes that are either overly narrow or overly broad, thereby distorting the subsequent assessment of market power and competitive effects.

At the same time, the limitations identified in this article should not be interpreted as a justification for abandoning market definition altogether. On the contrary, its continued relevance lies in its ability to provide a structured and transparent framework for organising competition analysis. What is required, however, is a reassessment of its role within that framework. Rather than treating market definition as a rigid and self-contained prerequisite, it should be understood as a flexible and context-dependent analytical tool whose function is to support, rather than determine, the outcome of the assessment. This shift in perspective has important methodological implications. First, it suggests that greater emphasis should be placed on the direct evaluation of competitive constraints, including the strategic behaviour of firms and the specific characteristics of the market environment. Second, it calls for a more cautious use of price-based methodologies, particularly in settings where price is not the primary parameter of competition. Third, it highlights the need to integrate a wider range of qualitative and quantitative evidence, without relying excessively on any single analytical tool. In this sense, the evolution of market definition reflects a broader transition within EU competition law towards a more effects-based and economically grounded approach.

Importantly, this transition does not imply the erosion of legal certainty, but rather its recalibration. While a more flexible approach inevitably introduces a greater degree of discretion, it also allows competition authorities to better align their analysis with the realities of modern markets. The challenge, therefore, is to strike an appropriate balance between analytical flexibility and methodological consistency. This requires a careful and transparent articulation of the reasoning underlying market definition, as well as a clear recognition of its limitations. The Commission's decisional practice in digital markets already indicates a gradual movement in this direction. As demonstrated in cases such as Google Search (Shopping) and Google Android, competition authorities are increasingly willing to move beyond rigid methodological frameworks and to adopt more pragmatic and context-sensitive forms of analysis. This emerging practice suggests that market definition is evolving from a rigid boundary-setting exercise into a more nuanced tool for identifying relevant competitive constraints.

Ultimately, the future of market definition in EU competition law lies not in its rejection, but in its transformation. As markets become more complex, interconnected, and innovation-driven, the analytical tools used to assess them must evolve accordingly. Market definition remains a valuable component of this toolkit, but only insofar as it is applied with an awareness of its limitations and in conjunction with a broader, effects-based analytical perspective. In this sense, the continued relevance of market definition depends on its ability to adapt to changing economic realities. Recognising its instrumental nature, and resisting the temptation to treat it as an end in itself, is essential to ensuring that EU competition law remains effective, coherent, and responsive in the face of ongoing technological and structural change.

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