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The fascinating theory of common ownership under the lens of competition law practitioners: any needs to rethink the antitrust toolbox?

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Abstract

During the last years there has been a prolific academic debate on the possession by institutional investors of minority shareholdings in firms active within the same industry, leading to a potential distortion of market dynamics (the so-called “common ownership” theory). The common ownership doctrine raises a number of questions, and it should be looked at with caution in light of the prejudice that an incorrect antitrust assessment may have over the activities of financial institutions. This article attempts to clarify the reasons why the still new and fascinating theory of common ownership as a means of distortion of market dynamics has a long way to go before being an antitrust enforcement priority. It is debatable the same notion of the existence of a direct causality between common ownership and anticompetitive effects, whereas alternative variables may explain why in a certain period a rise in prices has been observed. In any event, even if potential antitrust risks were effectively found to materialize, the traditional competition law toolkit and the current regulatory obligations to which institutional financial investors have to comply with are suitable and sufficient to deal with the potential concerns that the common ownership theory eventually brings about and case-by-case evaluations are typical of and should guide any competition law theory of harm.

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Keywords: competition law; antitrust; economics; institutional investors; investment funds; common ownership.

Summary: Introduction. – 1. The academic origins of common ownership. – 2. Common ownership and anticompetitive effects in the U.S. industries. – 2.1 The airline industry. – 2.2 The banking industry. – 2.3 The pharmaceutical industry. – Conclusions.

Introduction.

Starting from the United States, there has been a prolific debate on the idea that the presence of the biggest worldwide institutional investors and of asset management companies ("AMCs") of the caliber of BlackRock, State Street or Vanguard (*i.e.*, the Big Three) as minority shareholders in a plethora of firms active within the same industries, and allegedly competing in the same relevant markets, distorted market dynamic. This phenomenon has led to the emergence of the novel theory of harm of "common ownership" ("CO"), which assumes that institutional shareholders with minority stakes in competing firms have both the incentive and the ability to coordinate the commercial strategies of their portfolio companies or induce them to refrain from competing since that would increase the minority shareholders' overall portfolio value.

The premise upon which it relies is open to various criticisms and beforehand competition law practitioners are called to assess the specific course of action of various categories of institutional investors with a view to assess whether their (minimal) presence within the share capital of potentially competing undertakings is sufficient to allow them to control and to influence the market-decisions of these competitors. This may be the case when a minority shareholder is granted special corporate rights in the management of the portfolio company in spite of its minority interest (*e.g.*, veto powers on business plans, or on the appointment of apical managers). Could the biggest institutional investors on a global scale leverage their strength in the financial industry to control the multitude of competing undertakings included within their portfolio and of which they usually hold a minimal share capital percentage (typically highly below 10%)? Differently from corporate structures like interlocking directorates – which, under some circumstances, might raise antitrust criticisms since they create personal connections among independent competing undertakings – institutional minority investors with no relevant veto rights may not be in the position of actively influencing the management of their innumerable portfolio companies.

In this context, this article will evaluate the criticisms raised by the CO theory by analyzing the main doctrines on this topic. On that basis, the theory will be tested by assessing the economic context where it has been observed to question whether the alleged distortions of competition have been caused by CO or rather by other factors.

1. The academic origins of common ownership.

The academic dispute on CO has been led by the eminent Harvard Law School professor Einer Elhauge,[1] who takes the side with those claiming that CO may prejudice competition. Due to their presence in the share capital of competing firms, institutional minority shareholders are presumed to control and then coordinate the market decisions of the minority-owned competing portfolio companies or induce each of them to refrain from competing. These strategies aim at increasing the overall value of institutional investors' common shares, but risk undermining "intra-portfolio" fair competition. In light of these assumptions, the CO theory does not fit within the classic "single firm" profit maximization model, which should indeed characterize competitive markets.

The CO theory preliminarily implies that the firms in which institutional investors hold minority shareholding are horizontal competitors which, because of the presence of common investors in their share capital, opt to coordinate their commercial strategies or to refrain from competing. This is due to the fact that aggressive competition among them would harm common institutional shareholders. In practice, in case of portfolio companies in a horizontal competitive situation, the existence of financial links between them because of common shareholders may be an instrument to exchange confidential information among competing firms concerning the relevant markets where they are active, or anyhow facilitate the emergence of a collusive equilibrium (horizontal *coordinated* effects). In addition, this theory assumes that common shareholders may influence the decision-making power of the minority-owned companies, inducing them to opt for a "quiet life" and to refrain from reciprocally competing (horizontal *unilateral* effects).

In such a complex framework, to deal with the claimed anticompetitive effects of CO, Professor Elhauge calls for the adoption of a severe antitrust scrutiny by applying U.S. merger control rules. In this respect, he proposes to tackle CO under Section 7 of the Clayton Act.[2] That regulation is the main federal substantive law governing mergers, acquisitions and joint ventures, and it expressly prohibits the acquisitions of stock or assets whose *effect "may be substantially to lessen competition, or to tend to create a monopoly*". [3] According to Professor Elhauge, whenever CO has anticompetitive effects, it violates the Section 7 ban. This rule may thus serve as the key legal device to deem illegal under antitrust law the *presence* of institutional shareholders in competing firms to the extent they distort competitive dynamics. Under this line of reasoning, the scope of Section 7 is broadened to encompass the activities of institutional investors,

[1] E Elhauge, 'How Horizontal Shareholding Harms Our Economy – And Why Antitrust Law Can Fix It' (2020) 10 Harvard Bus. Law. Rev., 2; see also E Elhauge, 'The Causal Mechanisms of Horizontal Shareholding' [2019] working paper.

[2] 15 U.S.C. § 18.

[3] The original version of Section 7, enacted in 1914, only prohibited the acquisitions of stock of one corporation by another and, by its explicit term, it was not applicable to asset acquisitions. To avoid its elusion, the U.S. Congress amended it by passing the Celler-Kefauver Antimerger Act so to include tangible and intangible assets within its scope of application.

even though they are ordinarily exempt from merger control rules if they invest in companies for *sole financial* purposes. In addition, as common shareholders are claimed to favor collusion among competing firms, Section 1 of the Sherman Act that generally prohibits contracts, agreements, or any form of conspiracy in restraint of trade may also apply.

Likewise Professor Elhauge, other scholars – Posner, Scott, Morton and Weyl – have claimed that, in concentrated industries, mutual funds and other institutional investors soften competition among their commonly-owned companies to the extent that they compete within the same markets.[4] To limit institutional investors from indirectly gaining relevant power in the affected markets, they propose to cap their influence to 1% of the total size of an industry, or to allow them to acquire shares exclusively in one portfolio company *per* industry.

On the opposite, there are authors that even recently contested the assumptions underlying the CO theory and which, on the basis of statistical studies, empirically proved that "*greater common ownership is, all else equal, not robustly related to industry outcomes in a manner consistent with reduced competition*". As regards the existence of a causal link between common ownership and competition, they claim that "*it is too weak to be identified*" and "*the magnitudes of the* [anticompetitive] *effect may be too small to detect in an average effect estimated across all industries*".[5]

In light of these contrasting views, the studies carried out so far on CO in the airline, banking and pharmaceutical industries will be critically looked at to assess whether CO has effectively been the *cause* of the observed adverse pricing effects in those sectors, or whether any alternative factor may have played a role in explaining the high market prices, as confirmed by the cautious approach of the antitrust enforcers so far.

2. Common ownership and anticompetitive effects in the U.S. industries.

2.1 The airline industry.

The idea that CO caused adverse pricing effects in the U.S. airline industry is based on a study carried out by the distinguished scholars Azar, Schmalz and Tecu. They claim to have empirically proved with a 99% statistical confidence level that in the U.S. airline industry high levels of horizontal ownership resulted into an increase of market concentration, causing in turn a rise in airfares.[6] In this sector, the biggest AMCs allegedly have extremely large market power by having minority shares in most U.S. publicly traded airlines. As a consequence, common shareholders are claimed to influence the executive managers to align commercial strategies of competing airlines. To this end, common investors may use various methods to induce managers to pursue industry performance rather than

[4] E Posner and others, 'A proposal to Limit the Anti-competitive Power of Institutional Investors' (2017) 81(3) Antitrust L. J., 669-728.
[5] A Koch, M Panayides, S Thomas, 'Common ownership and competition in product markets' (2021) 139 J. Fin. Econ., 109-137.
[6] J Azar, M C Schmalz, I Tecu, 'Anticompetitive Effects of Common Ownership' (2018) 73(4) J. Finance, 1513-1565.

the performance of the individual firm, *in primis* incentive schemes that link compensation of managers to industry goals, with the consequence that managers are paid less for their own firm's performance and more in case of an increase in the overall industry performance.[7] As a result, common shareholders not only have the ability, but also the incentive to induce the executive managers of the minority-owned companies either to coordinate their strategies, or to refrain from engaging in aggressive competition among each other.

By proceeding a step further, the Airline Study then focuses on concentration within the airline industry and looks at the ownership composition of airline companies to assess the extent to which the most representative investors in the various airline companies had also shares of competing airlines. As such, the Study broadens the economic model that O'Brien and Salop developed more than a decade earlier to assess the competitive effects of horizontal joint ventures that post-transaction would have been active in the same relevant markets of the parents. That model still helps antitrust enforcers to evaluate the competitive risks in terms of potential coordination that may arise if a company holds the stocks of a direct competitor, as it is precisely the case of parent companies that will be active in the same relevant market of their controlled joint venture.[8] The model assumes that, in oligopolistic markets, where the few competitors are interested in maximizing a weighted sum of the overall profits accruing to their common owners, a shareholder's influence in a firm's strategic plan is proportional to the share capital it holds in that firm as well as in commonly owned companies. The same logic is applied to CO involving institutional investors, where partially owned companies are allegedly disincentivized from competing with each other since the increase in the value of one company's shares leads, in turn, to a decrease in the value of shares of competitors to the prejudice of the value of common investors' portfolios. Therefore, under the CO theory, the higher the market concentration index, the higher the intrinsic anti-competitive incentives created by CO.

Under the above assumptions, the Airline Study concludes that, in a situation in which common shareholders were present in various airline carriers active within an already concentrated sector, CO allegedly had a negative impact on airfares. To empirically strengthen the existence of a causal link between CO and the observed adverse effects on prices of airline tickets, the Airline Study evaluated whether the assumed anticompetitive incentives of common shareholders translated into *measurable effects* on product market competition (*i.e.*, on competition on airfares in the relevant market where the commonly owned airline companies were active). In that respect, the study assessed to what extent a variation in CO concentration in a given route over time caused changes in airfares in that route. The authors conclude that competition in airline routes decreased when the shareholders of incumbent airlines acquired

[7] M Anton and others, 'Common ownership, competition, and top management incentives' [2016] ECGI, finance working paper.

[8] DP O' Brien, SC Salop, 'Competitive effects of partial ownership: Financial interest and corporate control' (2000) Antitrust L. J. 67, 559-614.

significant ownership (and control rights) in an independent airline serving the same route, contributing to further concentration of the industry. Evidence of this negative effect is claimed to have been significant, in the order of a 3-11% increase of the average U.S. airfare within routes, as compared to a counterfactual scenario of separate ownership.

The Airline Study is certainly interesting as it tries to find one possible explanation to the observed pricing increase within a concentrated sector and it links it to the rise in CO. However, as the same authors make clear, the findings of that study are consistent with standard notions of corporate governance: only CO by the biggest shareholders (usually those ranked first and second) within competitors may have a positive and statistically significant effect on airfares. CO by investors with considerably lower shareholding (as it is usually the case of the Big Three) may have small and less statistically significant effect on prices. This is certainly relevant since this article focuses on the biggest AMCs and on other institutional investors, which typically operate as financial shareholders by holding minimal share percentages (below 10%) in their portfolio companies. Accordingly, under traditional rules of corporate governance, it is questionable that they can effectively influence the managers of their portfolio companies by holding minimal percentages of their share capital.

There are anyhow doubts as to the fact that it was the presence of common investors in airline companies to have certainly caused the observed increase in prices of airline tickets. To take a step further in the analysis, one should contextualize the Airline Study and assess the CO theory in light of the dynamics and events that characterized the U.S. airline industry in the period under investigation. In the following sections there will be hence an analysis of whether other events that occurred in that industry may have played a role in connection with the observed rise in airline ticket prices and may thus act as alternative (or even the only explanatory) variables that led those prices to increase.

The "Airline Study": any gap in the CO theory of harm?

The Airline study represents an important empirical application of the CO theory of harm in the U.S. airline industry as it explores possible causes of the observed pricing increase within a concentrated market. But was the CO the cause of that price increase or was that increase the effect of sector dynamics? In that context, a further question arises as to whether the antitrust enforcer may have intervened *ex ante* to prevent further concentration of the industry when reviewing concentrations among airlines which triggered the application of merger control rules. Could the antitrust enforcer have taken CO into account in the context of merger reviews as a contextual element in the competitive assessment? In the following sections, a clearer picture on these issues will be provided.

(i) The U.S. airline industry as a tight oligopoly.

In a relatively short period of time, the U.S. airline industry underwent a major wave of consolidation as a result of various mergers, that were reviewed by the antitrust authority. Could the DOJ have been more active

and vetoed some transactions on the assumption that parallel conduct leading to higher prices may have been easier in an oligopolistic structure?

To answer the above question, a preliminary analysis of the trend towards consolidation of the U.S. airline industry, experienced during the last two decades, should be undertaken. In particular, in 2008, the DOJ let Delta Air Lines to merge with Northwest Airlines. Delta was the third largest airline in the U.S. and Northwest was the fifth.[9] The merger gave rise to what was then the largest commercial airline in the world, with almost eight-hundred aircrafts. Despite the substantial market power that the merged airline would have enjoyed in the U.S. airline industry, after a six-month investigation the DOJ concluded that the merger would have produced substantial and credible efficiencies to the benefit of U.S. consumers.[10]

Two years later, in 2010, the DOJ cleared United Airlines' acquisition of Continental Airlines, after the companies divested some airport slots to Southwest Airlines.[11] To solve the anticompetitive concerns identified by the antitrust enforcer, United Airlines and Continental Airlines agreed to transfer takeoff and landing rights' slots and other assets at Newark Liberty Airport to a third-party, *i.e.* Southwest Airlines. Thereafter, the DOJ cleared Southwest's acquisition of AirTran Airways.[12] After a thorough investigation, the antitrust authority concluded that the merger was not likely to substantially lessen competition.

Again, in November 2013, the DOJ allowed U.S. Airways to merge with American Airlines' parent company (AMR) under commitment to divest a certain number of airport slots.[13] In this respect, the merging parties entered

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[9] In particular, Delta carried more than seventy-million passengers *per annum* and with regional affiliates serving more than three-hundred destinations in almost sixty countries, whereas Northwest carried at the time more than fifty-million passengers and serving almost two hundred and fifty destinations in twenty countries in North America, Asia and Europe.

[10] 'Statement of the DOJ on Its Decision to Close Its Investigation of the Merger of Delta Air Lines Inc. and Northwest Airlines Corporation' [2008] DOJ press release, 08-963. The clearance decision valued the fact that the two airlines competed with a number of other legacy and low-cost carriers (LCCs) in the offer of scheduled air passenger services on the vast majority of non-stop and connecting routes. In addition, the merger would have produced efficiencies in terms of cost savings for airport operations, information technology, supply chain economics and fleet optimization. Furthermore, the combination under single ownership of the complementary aspects of the airlines' networks increased the quality of airport services.

[11] 'United Airlines and Continental Airlines Transfer Assets to Southwest Airlines in Response to Department of Justice's Antitrust Concerns – DOJ Closes Investigation, Transfer of Newark, N.J., Assets Resolves Competition Concerns' [2010] DOJ press release, 10-974. In particular, United Airlines was the third largest carrier in the U.S. by revenue. At the time, it served approximately eighty million passengers and offered service to more than two hundred destinations in the United States and thirty other countries throughout the world. Continental Airlines was the fourth largest carrier in the United States by revenue, carrying almost seventy million passengers and offering service to more than two hundred fifty destinations in the United States and over fifty other countries throughout the world.

[12] 'Statement of the DOJ on Its Decision to Close Its Investigation of Southwest's Acquisition of AirTran' [2011], DOJ press release, 11-523. Southwest Airlines was based in Dallas and, at the time, it carried approximately ninety million passengers, serving seventy cities in the U.S., while AirTran was based in Orlando and carried approximately twenty-five million passengers in seventy cities in the U.S., Mexico and the Caribbean.

[13] 'Justice Department Requires US Airways and American Airlines to Divest Facilities at Seven Key Airports to Enhance System-wide Competition and Settle Merger Challenge' [2013] DOJ press release, 13-1202. More precisely, AMR was a Delaware corporation which, at the time, carried more than eighty million passengers to more than two-hundred fifty destinations worldwide, but it had undergone a period of financial distress, and in November 2011 filed for bankruptcy. US Airways was

into a settlement which would have incentivized LCCs to invest in new capacity at key U.S. airports and to compete nationwide on non-stop and connecting routes. As a result, airline travelers could benefit from more competitive prices and enhanced travel options. The settlement, which was approved by the District of Columbia in 2014,[14] solved the lawsuit that had been launched by the DOJ and then joined by six State general attorneys (Arizona, Florida, Pennsylvania, Michigan, Tennessee and Virginia) on the ground that the acquisition would have substantially lessened competition for commercial air travel in local markets throughout the U.S.

As the above excursus of the trend of consolidations in the airline sector makes clear, the DOJ did not refer to cross and common ownership as a cause for potential distortion of competitive dynamics within that sector. This is so even though the DOJ's clearance decisions of the notified mergers were adopted in the period covered by the Airline Study. In fact, that study covered some airline carriers that, at the same time, were subject to the DOJ's antitrust scrutiny (such as American Airlines, Southwest Airlines, Delta Air Airlines and Continental). Despite this clear overlap, the Airline Study claims that CO in airline carriers caused the observed rise in airfares, whereas the DOJ cleared the notified transactions which involved these flight carriers also on the basis of efficiency arguments to the benefit of passengers. Among these benefits, the DOJ referred to more competitive airfares. Hence, it is reasonable to assume that the antitrust enforcer would have at least mentioned CO when assessing the ownership structures of the merging airline carriers had CO raised criticisms under antitrust law on the basis that it would have likely caused a rise in airfares.

The above seems even more reasonable if one considers that, in addition to the aforementioned merger reviews, in 2015 the DOJ opened an investigation to assess whether the increase in average airfares was the result of a collusive strategy among airline companies to keep airfares high. Some of the investigated companies appeared as both portfolio companies of institutional investors and as parties to the transactions notified to the antitrust authority under merger control rules (like Delta Air Lines, Southwest Airlines, American Airlines and United Airlines). The antitrust investigation was probably triggered by a concern expressed by the U.S. Senate for an observed increase in airfares to the prejudice of final consumers. In a letter sent in June 2015 to William Baer, at the time Assistant Attorney General, the U.S. senator Richard Blumenthal called the DOJ to investigate the "*apparent anti-competitive conduct potentially reflecting a misuse of market power, and excessive consolidation in the airline industry*", a process within which the "*DOJ itself played a part … by approving several mergers and now consumers are paying sky-high fares as airlines engage in market conduct designed to keep capacity artificially low*". In this context, the DOJ decided to launch an investigation to assess the existence of coordinated effects among the airlines in breach of Section

also a Delaware corporation, carrying more than fifty million passengers to more than two hundred destinations worldwide.

[14] *United States of America et al. v. US Airways Group, Inc. and AMR Corporation* [2014], The U.S. District Court for the District of Columbia, 1:13-cv-01236 (CKK).

1 of the Shearman Act. To this end, it sent to the major U.S. carriers (American Airlines, Southwest Airlines and United Airlines) a letter to request copies of all communications they had exchanged and clarifications about their plans in terms of passenger-carrying capacity. Interestingly, what emerges from the few public available information is a classic conspiracy theory, that could have been achieved through an exchange of confidential information during trade association meetings. Nothing new for antitrust practitioners. However, the DOJ did not find any proof of conspiracy underlying the observed increase in average airfares and, as such, an enforcement action did not consequently follow.

The above explains why, although the CO theory implies that common minority shareholders are in the position to influence the management and to orient the commercial conducts of their portfolio companies, that "presumption" does not appear to have been solidly supported by evidence. Nor the antitrust enforcer should infer by the parallel conduct of the various portfolio companies the existence of an anticompetitive concerted action among them on the assumption that the likelihood for common shareholders to vehicle sensitive information reduced the intrinsic risks of competition.

The dividing line between legitimate parallel conducts and concerted *vs* unilateral actions is very thin. In this framework, because of the uncertainties as to whether legitimate parallel behavior or other factors (such as CO) may cause price increases, could antitrust enforcers step-in even though there is no evidence of detectable acts of collusion among common shareholders? The answer should be negative in light of the well-known theories on the application of competition law principles to oligopolies. Under the *theory of conscious parallelism*, in an oligopoly conscious parallel conduct is nothing more than a form of tacit collusion, that should be prosecuted under competition law like explicit collusion.[15] On the other hand, according to the *theory of interdependence*, in oligopolies parallel conduct deserves to be prosecuted under antitrust law only if accompanied by detectable acts of collusion which are not the result of legitimate interdependency among the few oligopolists.[16] Therefore, even a supra-competitive market equilibrium in oligopolies is not necessarily due to collusion, but may depend on the interdependency among the few

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[15] RA Posner, 'Oligopoly and the Antitrust Laws: A Suggested Approach' (1969) 21(6) Stan. L. Rev., 1562-1606. According to this author, conscious parallelism tacitly aims at altering unilateral actions of independent market players. As a consequence, the application of Section 1 of the Shearman Act against that tacit collusion "*would do no violence to the statutory language or purpose*" of the antitrust ban set forth therein "*and while difficult problems of proof and of remedy would be involved,* [it is questionable] *that they would be insuperable*".
By applying this theory to the airline sector, if an airline announces a pricing strategy or makes public statements concerning either future airfares or other commercial confidential information, and consequently other airlines implement a similar policy in the absence of any proof of contacts among them (even channeled by common shareholders), that public signaling may be evidence of the attempt to reach an anticompetitive equilibrium.

[16] D Turner, 'The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals To Deal' (1962) 75(4) Har. L. Rev., 655-706. To solve any criticisms, when antitrust law may not be applied because of the absence of a probative support as to the existence of a concerted conduct, new regulatory remedies should be framed to deal with the observed distortions of market dynamics whenever oligopolistic markets could not self-discipline.

competitors, that could easily monitor each other and find convenient to mimic each other strategy and converge to that equilibrium.[17]

The application of the interdependency theory to the U.S. airline industry, that seems to be more in line with traditional antitrust principles,[18] may help with explaining the observed fluctuations of prices in that sector. This argument finds support in a recent empirical study that observed distortions of competition on quality of airline services. By applying the interdependency theory, the study finds that "*in the US Airline industry … strategic non-price interactions between firms conform to expected oligopoly behavior*".[19] In this context, market transparency and interdependency among airlines may be pivotal in shaping the reciprocal commercial strategies as each carrier observes the conducts of competing airlines and modifies its behaviour accordingly. However, nothing new or problematic under antitrust law emerges in such a context.

Even in the civil lawsuit filed before the U.S. Court for the District of Columbia against US Airways and American Airlines to try blocking the merger between the two flight carriers,[20] the oligopolistic structure of the market – and *not* common minority shareholders as alleged "owners" of competing airlines – was investigated to assess whether it could have favored the emergence of a supra-competitive airfare price equilibrium.[21]

[17] This course of action exemplifies the legitimate behavior of a "*rational oligopolist*", who according to Professor Turner behaves "*in exactly the same way* [of] *the rational seller in a competitively structured industry*".

[18] In Europe, a similar trend may be observed. In this respect, in the leading Woodpulp II *case*, the EU Court of Justice clarified "*that parallel conduct cannot be regarded as furnishing proof of concertation unless concertation constitutes the only plausible explanation for such conduct*". This is so because the ban of anticompetitive agreements catches "*any form of collusion which distorts competition, it does not deprive economic operators of the right to adapt themselves intelligently to the existing and anticipated conduct of their competitors*". The principle expressed by the EU Court of Justice relies on the economic finding that, in oligopolies, conscious parallelism may arise in the absence of a collusive equilibrium (even tacit) among the few competing undertakings.
For more details, see A Rosas, E Levits, Y Bot, *The Court of Justice and The Construction of Europe, Analyses and Perspectives on Sixty Years of Case-law* (T.M.C. Asser Press 2013).

[19] S NOOR, 'Non-price competition in the U.S. airline industry: a VAR model' [2017] J. Econ. Stud. In particular, despite not referring to pricing but to another competitive variable, *i.e.* product quality, this study assesses the interactions among the major domestic airlines in the U.S. when taking decisions on product quality to make their services more attractive to travelers. It observes that in oligopolistic industries, where competition is highly influenced by the strategic interaction between a few competing firms, product quality is a relevant aspect of competition which could be easily observed. As a result, airlines are incentivized to improve the quality of readily observable airline services to retain market shares.

[20] *United States of America et al. v. US Airways Group Inc.* et al. (2014) The District Court for the District of Columbia, civil action 13-cv-1236 (CKK).

[21] In particular, in August 2013 the DOJ, six state general attorneys and the District of Columbia filed an antitrust lawsuit alleging that US Airway's $11 billion acquisition of American Airlines would have substantially lessened competition for commercial air travel in local markets throughout the United States. The merger would have eliminated two independent competing airlines, ending head-to-head competition between the two on numerous non-stop and connecting routes, leaving the market with only three similar legacy airlines – *i.e.*, Delta, United, and the merged airline. The reduction in the number of airlines from four to three would have shifted the industry towards a tighter oligopoly. In addition, four of the busiest airports in the country – *i.e.*, Reagan National, LaGuardia, John F. Kennedy International, and Newark Liberty International – were subject to slot limitations governed by the Federal Aviation Administration ("FAA"). Slots at these airports were concentrated in the hands of legacy airlines that had little incentive to sell or lease them to more aggressive carriers. Competition would not have been likely neither by non-legacy carriers, nor by new entrants because of the high barriers to entry due to the lack of slots' availability.

Although the transaction raised some antitrust concerns, the DOJ never referred to CO as a contextual element which may have favoured anticompetitive collusion (for example, in the form of higher airfares and lower quality services to the detriment of passengers).[22] Finally, the merger was cleared and the District Court required the merging parties to divest many slots, gates, and additional ground facilities at key airports around the country to incentivize LCCs to invest in new capacity and enter the market.

In this context, the economic theory that underpins the Airline Study – *i.e.*, the existence of a causal link between the increase in CO in U.S. airline companies and the rise in airfares from 2001 to 2013 – seems to lack empirical support, whereas it may have been the shift towards a tight oligopoly that made the market more transparent. In that scenario, competing airlines could have found easier to monitor their actions to implement parallel commercial strategies in the absence of coordination among them, and CO may have played no role in respect to the observed increase in prices.

(ii) CO is the cause, not the "effect" of oligopolistic prices: any (missed) chance for the U.S. antitrust enforcer to intervene?

On a different note, it has been claimed that CO may not be the cause of supra-competitive prices, but its effect. When an industry becomes more concentrated, the biggest institutional investors and AMCs step-in to acquire shares of companies active in that industry. This relies on the assumption that in an oligopoly companies can charge higher prices and increase their profitability. As a result, shares become more "valuable" and institutional shareholders increase the value of their share portfolios by acquiring shares of these companies. There is also a higher chance that these companies are included in financial indexes like the S&P500 – *i.e.*, those referred to in the studies on CO carried out so far and including companies on the radar of the biggest institutional investors. In this context, it is oligopolistic pricing that may contribute to CO, not the other way round.[23]

The above distinction (CO cause *vs* effect of monopoly pricing) is relevant to apply merger control rules and it raises doubts in connection with the solutions proposed so far to solve the alleged anticompetitive effects of CO, such as the wide application of Section 7 of the Clayton Act. That rule only prohibits mergers and acquisitions that have the effect of lessening competition or creating a monopoly. Thus, acquisitions of minority shareholdings that trigger the application of merger control rules, if not carried out for mere financial purposes, may already be blocked if they have the effect of loosening competitive dynamics in a meaningful way, but not

[22] More precisely, if one looks at the District Court's decision, the only reference to the ownership structure of the merging parties can be found in one of the settlement conditions. In particular, the merged company was obliged not to reacquire an ownership interest in the divested slots or gates during the term of the settlement. This obligation was merely ancillary to the effective implementation of the divestiture order since the re-acquisition of an interest in the divested slots would have deprived the order of its effects. Clearly, it had nothing to do with the CO theory as a new potential vehicle to influence commercial strategies of competing companies and accordingly distort market dynamics.

[23] BR Dryden, 'Horizontal Shareholding': Is Oligopoly Pricing a Symptom or the Disease?' [2017] ABA Newsletter of the Mergers & Acquisitions Committee.

simply because they might result in consolidation of an industry which in turn "causes" CO.[24]

The application of Section 7 of the Clayton Act to acquisitions of minority shareholding – although not necessarily by financial investors – has been already scrutinized by the U.S. courts and antitrust enforcers. However, only in the few cases where these transactions raised appreciable competitive concerns, the antitrust enforcers have challenged them.[25] In particular, these transactions have been clustered in three main categories[26] – transactions in which (i) the acquiring firm is a direct competitor of the target itself;[27] (ii) the acquiring firm has a controlling interest in a direct competitor of the target;[28] (iii) the acquiring firm has in a direct competitor of the target a non-controlling interest, which in some instances could raise concerns under an antitrust standpoint.[29]

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[24] For the sake of completeness, a similar "by effect" analysis should be carried out under European merger control law. In particular, the European merger regulation prohibits concentrations which would likely have the effect of "*significatively imped*[ing] *effective competition*" in the relevant markets (see, Council Regulation 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L 024/2004, 1 - 22).

The European merger control framework is to a certain extent more stringent than the U.S. one, since minority shareholding acquisitions by financial asset managers and other institutional investors are usually exempted from the merger scrutiny unless, *on jurisdiction*, these transactions grant minority shareholders with at least *de facto control* on the target companies. Should that be the case, the merger is subject to the European Commission's scrutiny which is called to assess, *on the merits*, whether the transaction is likely to cause prejudicial effects on competitive dynamics.

[25] ME Jacobs, 'U.S. Antitrust enforcement involving minority shareholdings' [2013] <https://www.fne.gob.cl/wp-content/uploads/2013/11/Minority-Shareholding-in-the-US.pdf>.

[26] PC Cuomo, C Malaise, C Xu, 'Partial Acquisitions: Recent MOFCOM Action Suggests Possible Divergence with U.S. Standards' [2012] CPI Antitrust chronicle.

[27] 'American Airlines cleared to acquire stock in Argentine Airline' [1998] DOJ press release, 98-320. In particular, the transaction involved the acquisition by American Airlines of 8.5% in its direct competitor, Aerolineas Argentinas and raised antitrust concerns as initially structured. Under the original proposal, American would have had a representative on the Aerolineas board of directors, as well as permanent rights to veto certain large investment decisions by Aerolineas. To solve the antitrust concerns, the parties restructured the transaction and American Airlines would have had no director on the Aerolineas board and limited shareholder rights until the Spanish interests were sold to third parties, at which time it would have become a passive investor. As a result, on July 1998 the DOJ cleared that acquisition, but the clearance did not preclude potential future interventions of the DOJ, which reserved the right to challenge the transaction in the future if American would have acquired the ability to influence Aerolineas' competitive decisions affecting U.S. markets or engaged in anticompetitive coordination.

[28] *United States v. Dairy Farmers of America*, (DFA's) (2005) U.S. District Court for the Eastern District of Kentucky, Civil Action 6:03-206-KSF. In April 2003, the DOJ filed a lawsuit challenging DFA's partial ownership interest in two rival dairies (Flav-O-Rich and Southern Belle Dairy). The DOJ alleged that, as a result of the two subsequent acquisitions (the first in Southern Belle Diary in 2002, and then in Flav-O-Rich), DFA's ownership interests in both dairies gave it an incentive to reduce competition and facilitate unilateral price increases regardless of any coordination because it would not matter if customers of either dairy switched to the other dairy in response to a price increase. DFA changed its governance rights, converting its common voting stock in the companies that operated both dairies into non-voting stock, with the consequence that it then obtained a motion for summary judgment as it was not anymore in the position to exercise control over the management of the dairies. However, on appeal by the DOJ, the U.S. Court of Appeals for the Sixth Circuit reversed the lower court's ruling, holding that the DOJ had presented sufficient evidence to prove that DFA's acquisitions violated antitrust laws. Nor the voluntary relinquishment of voting rights remedied the violation because DFA may have still imposed its voice upon the firm (for example, the firm relied on DFA for additional capital). As a result, DFA decided to sell the Southern Belle dairy plant to another firm.

[29] *Competitive Impact Statement, United States v. Univision Communications, Inc.* (2003) U.S. District Court of Columbia, Civil action 1:03CV00758. The transaction concerned the acquisition by Univision (*i.e.*, the largest broadcaster of Spanish language television programming in the United

By contrast, the Section 7 ban should not be applied if the alleged anticompetitive effects depend on the structure of the industry, which in turn causes (and it is not the effect of) horizontal shareholding. In a scenario in which CO may not be the cause of oligopoly pricing but rather its outcome, it should be indeed explored whether the implementation of *ex-ante* regulatory solutions is needed and may be preferable to the wide application of merger control rules to limit the activities of financial investors on a global scale.[30] In this respect, the potential negative effects that the introduction of additional regulations to those already applied to the financial sector should be also considered, *in primis* the risk of restraining their ability to diversify investments in a plethora of industries to reduce the economic risks to which final consumers are exposed when investing.

In any event, the fact that CO due to industry consolidation may eventually escape the antitrust scrutiny under merger control rules does not mean that it is exempted from the application of other antitrust rules. To the extent that there is evidence of an anticompetitive coordination among competing portfolio companies imputable to institutional investors in their quality of common minority shareholders of these firms, that conduct may be prosecuted *ex post* as a form of an anticompetitive restraint of trade or as an unfair commercial practice, respectively in breach of Section I of the Shearman Act and of Section V of the FTC Act.[31] By contrast, if there is no

States) of a partial ownership in the media company HBC, that owned and operated more than 60 radio stations in 18 geographic regions in the United States, most of which broadcast in Spanish. At the time of the transaction, Univision also had a minority interest in another Spanish language media company (Entravision) and significant governance rights, including the right to place two members on Entravision's board and the right to veto certain of Entravision's business decisions. Entravision was HBC's principal competitor in Spanish language radio in many markets. In this context, the DOJ expressed concerns that the acquisition would reduce the incentives of both partially owned companies to compete aggressively against each other in the sale of Spanish language radio advertising time and it would have led to an increase in prices for a significant number of advertisers. To solve the antitrust concerns and avoid enforcement actions, the DOJ and Univision entered into a settlement by which Univision was prevented from participating in Entravision governance or influencing its radio business. In particular, Univision agreed to divest a significant portion of its equity stake in Entravision, relinquish its right to two seats on Entravision's Board of Directors and give up the right to veto certain Entravision business decisions, in addition to reduce its ownership in Entravision to no more than 10%.

[30] This may be even more true if one considers that in general in the U.S. neither State laws nor federal law make charging high prices which may cause prejudice to final consumers (and not addressed to exclude competitors) unlawful, since even monopoly prices may serve to stimulate entry and further innovation (*Verizon Communications Inc., v. Law offices of Curtis V. Trinko, LLP* [2004] U.S. Supreme Court, No. 2-682). In this context, antitrust officials have reminded that "*simply condemning a high price… is not antitrust. It is a regulatory action meant to reengineer market outcomes to reflect enforcers' preferences*" (see M K. Ohlhausen, 'What Are We Talking About When We Talk About Antitrust?' [2016] Concurrences Rev.).

[31] At least in Europe, such conduct by the biggest institutional investors may be also caught by the abuse of dominance prohibition to the extent that the antitrust enforcer succeeds in proving that these investors presented on the market as one collective entity, which abused the single collective dominant position it held to charge supra-competitive prices to exclude competitors of their portfolio companies. The prohibition of abuse of dominance is general and it could also address acquisitions of minority shareholding by institutional investors which are likely to prejudice competitive dynamics in the relevant market. However, abuses of collective dominance are difficult to prove for competition authorities and are quite rarely brought. This is so as to bring a credible abuse of collective dominance case, the authority needs to observe a stable behavioural pattern where the various undertakings, that collectively hold a significant aggregate market market share, repeatedly act jointly to implement a series of commercial strategies which are likely to prejudice market dynamics (see Judgment of 21

evidence of a conduct likely to alter market dynamics due to CO in the form of explicit or tacit collusion, the antitrust toolbox should not be applied.

As made clear, in assessing a number of mergers that involved airlines, the U.S. antitrust authority widely looked at sector dynamics but ultimately it did not veto these transactions, even though it may have avoided the further concentration of the industry, which could have minimized the claimed risk that the few common shareholders of competing airlines coordinated their activities. These mergers were indeed cleared on the basis that they did not have the effect of distorting competition. In fact, they were deemed to be beneficial to passengers.[32]

In this context, the question is not whether CO in the U.S. airline industry had anticompetitive effects, but whether in assessing a certain number of sequential mergers the U.S. antitrust enforcer should have scrutinized them more in-depth and to what extent the wave of industry consolidation caused (and was not caused by) CO and favoured the alleged coordination on prices. Did the authority adopt a too lenient approach in clearing these transactions, allowing airlines to be shielded from the application of the antitrust ban and to coordinate on prices or flight schedules?[33] In this respect, various studies on airline M&As claim that prices within that industry increased after a merger was completed,[34] and the increase in airline dominance within an airport due to a merger resulted in higher barriers to entry and higher fare *premia*.[35]

The airline mergers discussed above were scrutinized by the antitrust authority and cleared. Whether the enforcer was too lenient in clearing these transactions, or indeed right in assessing their pro-competitive effects rests upon the discretion of the antitrust authority, which may be eventually questioned. In addition, some of the U.S. airline mergers were approved by court orders and thus marked with a judicial seal. Again, the application of traditional antitrust principles was not questioned. In such a context, one could reasonably conclude that when an increase in prices observed within a concentrated market gets attributed to ownership structures of market players, but no evidence of anticompetitive conducts is found, the intervention of antitrust authorities to fill in potential regulatory gaps may not represent the preferable policy solution.

2.2 The banking industry.

February 1973, *Europemballage Corporation and Continental Can Company Inc. v. European Commission*, 6/72, ECLI:EU:C:1973:22).

[32] For example, the US Airways/American Airlines merger improved network connectivity, increased flier loyalty programs, and optimized the use of aircrafts. Duplicative activities were also dismissed due to asset combination, inefficient or redundant hubs, or route closure. Furthermore, this merger also led to operational efficiencies through integration of the merged airlines operating systems. The US Airways/American Airlines merger led to a loss of a competitor on non-stop routes, but it still created an effective competitor in several airport-pairs, to the benefit of millions of passengers.

[33] W Gillespie, O Richard, 'Antitrust Immunity and International Airline Alliances' [2001] Economic Analysis Group of the DOJ's Antitrust Division.

[34] Testimony of GL. Dillingham, 'Airline Industry Consolidation: Hearing Before the Subcommittee on Aviation' [2013]; S Borenstein, 'Airline Mergers, Airport Dominance, and Market Power' (1990) 80 American Econ. Rev..

[35] S Borenstein, 'Hubs and High Fares: Dominance and Market Power in the U.S. Airline Industry' (1989) 20 RAND J. Econ., 344-365.

The CO theory has also been applied to the U.S. banking sector where horizontal and cross shareholding allegedly caused a significant adverse effect on bank fees and rates.[36] The main study reports that over the last decade an increase in fees for banking deposit services has been registered in the U.S. and it has been caused by the high presence of common shareholders in competing banks (the "Banking Study").[37] More precisely, that study claims that during the period subject to investigation institutional investors were among the top five shareholders of the nation's five largest banks. In addition to CO, cross-ownership links among competing banks strengthened the interconnections among them.

By applying the principles discussed so far on CO, the price increase has been causally linked to the existence of a collusive equilibrium among the common investors, who allegedly made use of various corporate governance mechanisms to explicitly coordinate the commercial strategies of the banks in which they held minority shares (*e.g.*, informal meetings with managers of portfolio banks or adoption of strategies aimed at disincentivizing the management of these participated entities from engaging in head-to-head competition with competing banks). In such a context, the Banking Study calls for the intervention of the antitrust authorities.

The antitrust assessment of the "Banking Study": any lacuna?

The arguments set forth in the Banking Study rest on the assumption that CO allegedly distorted market dynamics since the biggest institutional investors were in the position to leverage their valuable presence in the banks, within which they held common shares, to induce their management to collude on the increase of prices of banking services. CO by institutional investors was perceived to be critical under competition law and the antitrust enforcer had to step-in, notwithstanding the pivotal role of banks in the economy such as helping clients with diversifying investments and reducing financial risks.

The results of this analysis clearly demonstrate that, instead of resulting in a (not still proved) distortion of competition, CO can bring about several positive effects on market dynamics. Some of these effects do not concern competition as such but the real economy at large. In the financial sector, at a macro level, CO helps with achieving the stability of the financial system, for example, during a liquidity crisis. As said, another valuable pro-competitive effect is at micro level, in terms of benefits to individuals who invest in passive index funds and benefit from the lower transaction costs charged by experienced asset managers and the diversification effects that the passive index funds achieve.[38]

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[36] MC Schmalz, J Azar, R Sahil, 'Ultimate Ownership and Bank Competition' [2016] CEPR working paper.

[37] The assessment relies on the assumption that bank concentration is generally prejudicial to market dynamics as it may impact on monetary policies, slow down the adoption of new technologies, as well as adversely affect consumers, which may receive lower rates on their savings despite paying more for loans.

[38] European Parliament, Study of the ECON committee, Barriers to Competition through Common Ownership by Institutional Investors [2020], 53 ff.

In the above framework, even if anticompetitive effects occurred as a result of CO (which should still be proved), the trade-off between detrimental effects and benefits to final consumers would call for a balanced equilibrium between the two. In any case, the application of the CO theory to the banking industry raises doubts under a competition law standpoint, especially in light of the characteristics of that sector.

(i) The value of "intra-industry" diversification in the banking sector.

At a micro-economic level, AMCs and other institutional investors are beneficial to final consumers to the extent they help clients with diversifying their investments and reducing financial risks. The fact that institutional investors have in their portfolio financial institutions amplifies the positive effects of investment diversification at a wider macro-economic level. Diversification does not only occur between different financial industries where the portfolio firms held by the AMCs are active (*e.g.*, banking, insurance), but also between different financial products offered by the institutions held by common shareholders. As a consequence, the implementation of measures that would make diversification more difficult could induce financial entities to refrain from making investment decisions, with a negative impact on various economic sectors. This is particularly true in case of important financial entities, whose failure or even a substantial prejudice to their lines of business may have a *domino* effect on other sectors of the economy. In this framework, it is evident that aggressive competition may prejudice the stability of the system. This thin equilibrium between sustainable competition and financial stability risks being jeopardized in case of a rigorous application of antitrust rules to CO. There are recent studies that empirically document that "*the increase in common ownership … suggests a positive effect on the resilience of the individual banks and the stability of the entire financial system. Common, as compared to non-common, owners may be more willing to help an individual bank suffering a negative shock, if the bank's financial problems have a knock-on negative effect on other banks*".[39]

The arguments above do not imply a more lenient application of competition law to the banking sector, whereas only a case-by-case assessment in view of the specificities of the banking sector before enforcing competition law therein. This analysis should take into account the connections between perfect competition and financial stability: the trade-off between the two is essential and there are situations in which relaxing competitive dynamics and increasing industry concentration may promote financial stability. If that is the case, from a consumer-welfare perspective, under certain circumstances concentration may be preferable to fierce competition.[40]

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[39] A Banal-Estañol, N Boot, J Seldeslachts, 'Common ownership patterns in the European banking sector - The impact of the financial crisis' (2022) 18(1) J. Compet. Law Econ., 135–167; see also, European Parliament, Study requested by the ECON Committee, Barriers to Competition through Joint Ownership by Institutional Investors [2020].

[40] F Allen, D Gale, 'Competition and Financial stability' (2004) 36(3) J Money, Credit and Banking.

From a policy perspective, the arguments above supports the value of sector-specific assessments of the risks implied by the CO theory, which seem to have been overlooked in the Banking Study. The proposal to cap institutional investors' scope of activities, such as the prohibition of holding more than 1% in (any) industry or investing in more than one firm *per* industry, should be carefully assessed before being applied to the banking sector. Even though horizontal shareholders in banking institutions led to more loose competitive dynamics – which, in any event, is controversial – CO may have contributed to financial stability of the industry. Therefore, while in the airline sector one may eventually question the positive effects of CO, which were still present and antitrust enforcers cleared airline mergers precisely on the basis of efficiency arguments, these positive effects are more prominent in the banking industry.

Furthermore, in the few cases in which competition law enforcers have addressed the possible risks to competitive dynamics due to the existence of connections among competing banks, a red flag has not been raised against horizontal shareholders. Other potential interconnections due to personal ties and interlocking directorates have been under the spotlight of the antitrust enforcers. Even with respect to interlockings, that raise a higher degree of antitrust risk, the perceived competition law concerns raised by personal interconnections among competitors have been addressed so far using the traditional antitrust toolkit or opting for *ad hoc* regulatory solutions, and not calling for the adoption of rigorous over-comprehensive measures likely those that have been proposed so far by eminent practitioners to solve the claimed competitive risks raised by CO.

(ii) *Again, any role for the oligopolistic structure of the industry on pricing effects?*

Like the airline industry, the U.S. banking sector has experienced a wave of consolidations during the last two decades. Such trend begun in the late '80s and continued thereafter, allowing banks to acquire a significant position within the relevant local markets.[41] In such a framework, was the observed price variation of banking services caused by horizontal shareholding or rather the result of a parallel pricing behaviour in a concentrated sector in the absence of conspiracy?

Likewise the airline industry, also the banking sector has been for years on the radar of antitrust enforcers. Still, corporate governance of banking institutions has raised antitrust concerns only in limited circumstances, which mainly had to do with the presence of personal links (*i.e.*, interlocking) among competing banks, not CO. For example, in the U.S. the DOJ has for years looked at conducts in the derivatives markets, and fined individual traders and financial institutions for manipulation of the London interbank offered rate ("LIBOR").[42] On the basis of the little information available in

[41] DC Wheelock, 'Banking Industry Consolidation and Market Structure: Impact of the Financial Crisis and Recession' (2011) 93(6) Federal Reserve Bank of St. Louis Rev., 419-438. See also, FM Scherer, 'Financial Mergers and Their Consequences' [2013] Harvard Kennedy School, M-RCBG Faculty Working Paper Series.

[42] Interest rate derivatives (*e.g.*, forward rate agreements, swaps, futures, options) are financial products traded worldwide which are used by banks or companies for managing the risk of interest

the public domain, no reference to corporate structures of the banking institutions involved in those cartels seems to have been under the spotlight of the antitrust enforcer.[43]

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rate fluctuations. They derive their value from the level of a benchmark interest rate, such as the LIBOR – which is used for various currencies including the Japanese yen (JPY) – or the Euro Interbank Offered Rate (EURIBOR), for the euro. These benchmarks reflect an average of the quotes submitted daily by a number of banks who are members of a panel (panel banks). They are meant to reflect the cost of interbank lending in a given currency and serve as a basis for various financial derivatives. Investment banks compete with each other in trading these derivatives.
For more details, 'Deutsche Bank's LIBOR settlement' [2015] DOJ press release, 15-499.

[43] A similar investigation has been carried out in Europe for a while. More precisely, in 2013 the European Commission fined international financial institutions for participating in illegal cartels in the markets for financial derivatives (*Euro Interest Rate Derivatives* (Case AT.39914), Commission Decision [2013]). According to the antitrust enforcer, between 2005 and 2008 some of the biggest banking entities (*i.e.*, Barclays, Deutsche Bank, The Royal Bank of Scotland, Société Générale, Crédit Agricole, HSBC and JPMorgan) reached an anticompetitive agreement in connection with interest rate derivatives denominated in the euro currency ("EIRD"), whereas some of them were part of one or more bilateral cartels relating to interest rate derivatives in Japanese yen ("YIRD") in the period from 2007 to 2010. The EIRD cartel was implemented through information exchange among traders of different banks, who discussed their bank's submissions for the calculation of the EURIBOR (*i.e.*, the Euro Interbank Offered Rate), as well as their trading and pricing strategies with the aim of distorting the normal course of pricing components for these derivatives. The YIRD cartels were indeed implemented by traders of the participating banks on certain JPY LIBOR submissions through exchange of commercially sensitive information. The information exchanges enabled traders to make informed market decisions on whether the currencies they had in their portfolios could be either sold or purchased. The conspiracy was led by traders, who did not hold shares within competing financial institutions, but traded currencies on their behalf. Interestingly, if one looks at the corporate structures of some of the undertakings involved in the European EIRD and YIRD cartels in the period when the contested infringement of competition was committed, will note that horizontal ownership or at least connections with the biggest AMCs already existed. However, as mentioned, no reference to any role that they may have played in connection with conducts carried out by their owned financial institutions emerge from the antitrust investigations.
In particular, considering that in 2009 BlackRock acquired Barclays' global asset management branch (*i.e.*, Barclays Global Investors, "BGI"), it is reasonable to assume that, before 2009 and thus at least in part of the period covered by the EIRD cartel, Blackrock might still have connections with Barclays, involved in that cartel (*Blackrock / Barclays Global Investors UK Holdings* (Case COMP/M.5580) [2009]). If this held true, instead of reaching a collusive equilibrium with other AMCs like Vanguard, SSGA or Fidelity to coordinate the conducts of the participated or connected financial institutions, Blackrock opted to purchase BGI, Barclays' branch which directly competed with the biggest AMCs. The presence in the market of companies like Vanguard or SSGA was indeed valued by the European Commission as a pro-competitive element, that minimized the risk of distortion of competitive dynamics as a result of the merger in the only possible segment where the parties would have held more than 15% combined market share, *i.e.* the passive asset management segment.
Interestingly, Crédit Agricole and Société Générale also had relevant connections which led the two institutions to conclude a merger in 2009. They were both involved in the EIRD cartel together with Barclays, whose asset management branch was acquired by BlackRock. Nevertheless, Crédit Agricole decided to acquire sole control of the asset management branch of Société Générale, which offered several active asset management services, such as the creation and management of mutual funds and the offer of portfolio management services in direct competition with the biggest AMCs, including BlackRock (*Crédit Agricole / Société Générale Asset Management* (Case COMP/M.5728) Commission decision [2009]). In authorizing this merger, the European Commission acknowledged that the concentration of these entities was unlikely to significantly impede effective competition in the European markets for the offer of active asset management services (*e.g.*, other important asset managers remained on the market; institutional investors retained considerable bargaining power since they could have negotiated better management fees or investment conditions with other AMCs had the merged entity increased fees or lowered performance standards; retail customers were not damaged as low barriers to expansion existed in the retail segment for asset management services). The antitrust authority also recognized that independent funds remained in the market and competed on investment returns.
In the merger assessment, as in the U.S., neither corporate governance of the relevant banks nor the structure of the banking industry seems to have played any role. Whereas the acknowledgment that third-party investment funds continued to exercise a competitive constraint is a valuable

In light of the above, considering that financial institutions produce important financial benefits at macro and micro levels and can contribute to the stability of entire sectors of the economy, a rigorous antitrust intervention is not desirable. The antitrust intervention may be indeed justified only in case of evidence of anticompetitive conduct or of corporate governance links that will more likely favor an anticompetitive strategy (*e.g.*, interlocks).[44]

2.3 The pharmaceutical industry.

The CO theory has so far also been applied to sectors where not just pricing, but innovation is a relevant competitive variable, including the pharmaceutical industry. The main study in this field claims that CO between brand and generic-drug manufacturers in the U.S. over the sample period 2003/2016 delayed the entry of generics into pharma markets, which in turn had an adverse effect on prices of pharmaceutical products (the "Pharma Study").[45] In particular, the study looked at patent infringement lawsuits launched by originators against generics over that reference period and found that, in almost 22% of the launched lawsuits, there were common shareholders between generics and brand-name manufacturers. On this basis, the Pharma Study asserts that the probability that two drug-companies entered into a settlement agreement by which the brand manufacturer compensated the generic manufacturer to stay out of the market (*i.e.*, pay-for-delay agreement) increased when generics' shareholders held, at the same time, stakes in the brand-name firm. To support these findings, the study reports that only a small percentage of disputes (16%) led to a trial, whereas the mean settlement rate was found to be at 43.6% and varied across federal district courts, with a dismissal rate of 33%.

In this context, the Pharma Study comes to the conclusion that CO among brand and generic drug manufacturers resulted in an increase of patent settlements. This phenomenon in turn had the effect of artificially extending the brand's monopoly *status* beyond the expected date of generics' entry into the relevant markets. This reasoning relies on the premise that generic manufacturers with high ownership stakes in brand companies were induced to settle disputes over validity of the brand-drug manufacturers' patents since settlements would have maximized the overall profits of common shareholders. As a result, final consumers were

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indication of the fact that the European market for asset management services is rather competitive, and evidence of collusion among the biggest AMCs (for example through their portfolio companies) has not emerged so far.

[44] This argument is further supported by the findings of a market study carried out by the UK Financial Conduct Authority ("FCA") to identify competitive concerns within the asset management sector and eventually launch enforcement actions. In its concluding report, the FCA did not identify any concern in connection with minority shareholdings held by the biggest AMCs in competing undertakings (FCA, Final report on Asset Management Market Study [2017]). The FCA only referred to the importance of strengthening the requirements for asset managers to act in the best interests of investors and to offer high quality services in a transparent way, on the assumption that this would have increased efficiency of the UK asset management industry to make it more attractive for investors, an issue clearly different from the antitrust theory of harm underlying the CO doctrine.

[45] J Gerakosy, J Xiez, 'Institutional horizontal shareholdings and generic entry in the pharmaceutical industry' [2019] Tuck School of Business, working paper.

prejudiced as they had to pay drugs more than what they would have paid had the generics entered the market.

In the following paragraphs the findings of the Pharma Study will be analyzed with a focus on competition on innovation to assess the soundness of its underlying assumptions. The Pharma Study seems to have overlooked the value of competition on innovation, despite it being a key competitive parameter in the pharmaceutical industry. In addition to pricing effects, generic companies exercise competitive pressure on brand-drug manufactures by incentivizing them to engage in research and development ("R&D") with the aim of enhancing or producing new drugs which would obtain additional patent protection and shield their market power from generics' entry into the market. On this basis, the interconnections between patent settlements and innovation should be investigated to assess whether the former may have any positive effect on the incentive of brand-drug manufacturers to engage in R&D. [46]

(i) Common ownership in the pharma industry and IP rights.

The Pharma Study touches upon one of the most debated topics by competition law practitioners, namely the relationship between dynamic competition and intellectual property ("IP") in a context where IP rights are essential to reward companies for investing in R&D.

The relationship between pay for delay, patent protection and innovation is hence particularly complex as there may be situations in which patent settlements could have a positive impact on the incentives of brand-manufacturers to innovate when they delay market entry of infringing drugs. Moreover, a pay for delay strategy offsets costs that the parties would have incurred should they had gone to trial, with patent validity being upheld at the end of the dispute. In this complex framework, the following sections will discuss whether the starting position that antitrust enforcers should take, when assessing pay for delay in cases where common investors are present within the share capital of brand and generic-drug manufacturers should be one of skepticism, or whether the benefit of doubt should be indeed given in light of the possible positive effects on innovation that patent settlements may have – contrasting with the findings of the Pharma Study.

The Pharma Study almost overlooked the impact of pay for delay on innovation, to focus instead on pricing effects, although innovation is an important dimension over which companies compete in industries characterized by substantial R&D investments, such as the pharmaceutical sector. In case of multinational pharmaceutical companies, which in the pharma industry represent the main target of institutional investors, R&D is particularly relevant as pharma manufacturers rely more on continuous innovation than on short term financial profits. The reason is simple: research may lead to the development of new drugs; the related patent

[46] ÁL López, X Vives, 'Overlapping Ownership, R&D Spillovers, and Antitrust Policy (2019) 127 J. Pol. Econ., 2394; M Anton and others, 'Innovation: The Bright Side of Common Ownership?' [2018] <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3099578>; P Borochin, J Yang, R Zhang, 'Common Ownership Types and Their Effects on Innovation and Competition' [2020] <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3204767>.

protection covering new drugs shields the brand-name manufacturer from the competitive pressure of generic companies, which in turn has a positive impact on the long-term financial profitability of that pharma company. As such, the relation between innovation and competition is key, although challenging in the context of a pay-for-delay settlement.

Against this background, there is the concern that patent settlements block generic entry and thus limit competition between the originator and the generic companies. This delay has a prejudicial effect on competition on prices since consumers may not benefit from low-cost generic drugs. However, it is also true that pay for delay safeguards patent protection in case of "strong" patents, whose validity may be still proved in court. In that scenario, pay for delay strengthens the originators' incentives to innovate. In the absence of pay for delay, these incentives may be lower due to the risk for brand-name manufacturers of not recovering the R&D expense to produce a new drug and earn a fair rate of return as a result of the market entry of generic companies, which may challenge the validity of the original patent before its expiration. In the long term, patent protection through pay for delay could be beneficial to consumer welfare in terms of availability of innovative drugs.[47]

When the originators and the generics have common owners, in order to decide whether to settle or engage in a long and expensive litigation, whose outcome is *ex ante* uncertain, common shareholders may have an incentive to assess the costs for generics to enter the market as opposed to those of the originators to innovate. This exercise is certainly complex and subject to a degree of discretion. This is further complicated by the fact that the approach of competition authorities in scrutinizing patent settlements in the pharmaceutical industry evolves over the years. In the U.S., only in recent years the authorities have opted for the application of the 'rule of reason' standard and, as such, for a flexible, *case-by-case* assessments of patent settlements and pay for delay.[48] In Europe, the approach of the competition

[47] Y Ding, X Zhao, 'Pay-for-delay patent settlement, generic entry and welfare, International Journal of Industrial Organization' (2019) 67.

[48] In 1984 the Hatch-Waxman Act, that amended the 1938 Federal Food, Drug and Cosmetic Act (FFDCA), legislated market approval for low-cost generic pharmaceuticals by ruling that, at the expiration of the originator's patent or after having successfully challenged the validity of that patent, the first generic manufacturer filing an abbreviated new drug application was entitled to an exclusive 180-day right to market a new version of the brand medicine. Generic companies had thus an incentive to challenge brand patents because the first could enjoy the benefits of the exclusivity window, but reverse payment settlements have been used as an alternative to patent litigation. These patent settlements have thus called the attention of antitrust enforcers on the basis that they could buy off potential competitors and deprive consumers of the benefits of generics' low-cost medical products. In this context, the U.S. antitrust enforcers have initially shown a quite rigorous attitude in the assessment of those agreements, but they have recently favoured a more cautious approach.
In 2003, rejecting the strict *per se* approach upheld by the Sixth Circuit of the Court of Appeal *In Re Cardizem*, the Eleventh Circuit in *Valley Drug Co.* focused on the *scope of patent test* (*Valley Drug Co. v. Geneva Pharm.* (2003) Court of Appeals, Eleventh Circuit 344 F.3d 1294). In particular, the case concerned a payment made by Abbott to generic companies to delay their entry into the market for drugs containing terazosin hydrochloride, that was used for hypertension diseases. In that case, the Court of Appeal held that patent settlements are valid as long as they remain within the scope of the patent, on the basis that "*exposing settling parties to antitrust liability for the exclusionary effects of a settlement reasonably within the scope of the patent merely because the patent is subsequently declared invalid would undermine the patent incentives*". This approach was then followed by other

authorities and courts has been rigorous and these agreements are usually qualified as *by object* restrictions of competition, with the consequence that they are deemed to be illegal under antitrust law without engaging in more discretionary *by effect* analyses and hence regardless of evidence of their anticompetitive effects.[49]

With respect to the core topic of this article, both in the U.S. and in Europe the relation between patent settlements and CO by institutional investors has not been assessed so far by antitrust authorities, but should it come on the radar of these enforcers, the presence of common shareholders in the share capital of originators and generic companies should not justify a too rigorous stance. In a scenario in which the originator simply tries to extend the validity of its patents in the absence of further innovation, the patent is weak, and it is likely that a court will uphold its invalidity. As a consequence, patent settlements are not functional to protect incentives to innovate and it is reasonable to assume that generic companies will incur the risk of patent litigation to enter the market. In fact, even if one assumes the presence of common (minority) shareholders in the share capital of originators and generic manufacturers, the majority of the shareholders' base of the generic company will be made up of non-common shareholders with an interest in entering the market immediately. As such, the decision as to whether to enter into a patent settlement does not rest on the presence of common

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Appellate Courts, that upheld the legitimacy of reverse payment agreements as long as the patent litigation did not amount to a sham or baseless litigation.

The approach of the FTC was indeed stricter. In the 2010 Staff Study on Pay for Delay agreements, by recalling a Court of Appeal's decision ruling on the invalidity of such agreements under the *per se* category, the FTC highlighted how a strict approach had a deterrent effect on those practices in the period from 1999-2004. In the words of the FTC, since 2005 the less rigorous approach of some Courts of Appeal resulted in the increase of such settlements. Therefore, it should not be welcomed as these practices posed risks to competition.

Then, in 2012, the scope of the patent test was also judicially rejected in the *Re K-Dur Antitrust Litigation*. In that case the Third Circuit expressed a distaste for the presumption of validity of reverse payment settlements when the agreement did not go beyond the patent scope. The Court adopted a "*quick look*" standard, which had to be applied in light of "*the economic realities of the reverse payment settlement rather than the labels applied by the settling parties*". More precisely, a reverse payment settlement agreement that aim at delaying generics entry into the market amounts to a "prima facie *evidence of an unreasonable restraint of trade*", that could be rebutted by showing that the payment has not been concluded to delay entry (*In re K-Dur Antitrust Litigation* (2012) U.S. District Court for the Eastern District of Pennsylvania 686 F.3d 197).

The inconsistencies between different Circuits of Court of Appeal were finally composed by the U.S. Supreme Court, that granted *certiorari* in the *Actavis litigation* (*FTC v. Actavis, Inc*. (2013) U.S. Supreme Court 133 S. Ct. 2223). On June 17, 2013, the U.S. Supreme Court, disagreeing with the scope of patent and the quick look tests, upheld a *rule of reason* approach. In the words of the Supreme Court, while presumptive rules (*e.g.*, quick look) are justified when "*an observer with even a rudimentary understanding of economics could conclude that the arrangements in question would have an anticompetitive effect on customers and markets*", reverse payment settlements "*do not … meet this criterion*". They are complex agreements, and their anticompetitive nature could depend on several factors, including the size of the payment, its value in relation to anticipated litigation costs or the lack of any convincing justification.

[49] See the recent EU Court of Justice's judgment in *Lundbeck* upholding the European Commission's decision which had fined the originator Lundbeck and various generic companies for having entered into settlements of patent disputes, that had to be qualified as restriction of competition *by object* in violation of Art. 101 TFEU, simply aimed at delaying generics' entry into the market in the absence of any substantiated pro-competitive effect associated with those agreements (Judgment of 25 March 2021, *Lundbeck v Commission*, C-591/16P, ECLI:EU:C:2021:243). See also, Judgment of 12 December 2018, *Servier and Others v Commission,* T-691/14, ECLI:EU:T:2018:922; *Cephalon Inc / Teva Pharmaceutical Industries Ltd* (Case AT.39686) Commission Decision [2020].

shareholders, but rather on non-common owners representing the majority of the shareholder basis of the generics, which should be compensated for the loss they suffer as a result of the delay in entering the market.

If one indeed assumes that the strategies of the generic companies were only defined by common shareholders, even though they hold minority shareholding, one should also consider that the conclusion of patent settlements is unreasonable and irrational: why should originator companies enter into patent settlements and give up to financial resources to compensate generic companies, also (and mainly) to the benefit of non-common shareholders, to block generics from entering the market if they could obtain the same result by simply orienting the commercial strategies of these companies without incurring any cost? The premise upon which that argument rests may be hence erroneous.

It is more logical to think of patent settlements as a means to induce generic companies, subject to control of non-common shareholders, to refrain from entering the market in case of "strong" patents, but which could be still contested in court. Accordingly, even if originator and generic companies have common shareholders, no specific rules are needed to assess the possible anticompetitive effects that patent settlements among these companies may have, with the final aim of balancing IP protection and fair competition.

(ii) *CO in the pharmaceutical industry and the boundaries of relevant market definitions.*

Finding an equilibrium between IP protection and fair competition is not an easy task in the pharmaceutical industry, where the same definition of relevant markets, that is a first step in competition law assessments, is tricky. This is all the more valuable in connection with the CO theory, that looks at competitive dynamics in the *industries* in which portfolio companies of common institutional investors are active, rather than preliminarily defining the relevant markets in which these minority-owned companies compete. The incorrect definition of relevant markets may lead to erroneous antitrust assessments. In addition, in the pharma sector, market definition has traditionally been controversial because of the complexity of identifying substitutable drugs from a demand side standpoint since prices are not necessarily indicative in this respect.

In light of the complexities of this industry and of the fact that prices of medicines may have little to do with industry-wide trends upon which the CO relies, the assessment of the potential anticompetitive effects due to the existence of corporate governance links in the form of common shareholding between originator and generic companies should be conducted on a *case-by-case* basis by preliminarily considering the specific relevant markets – from a competition law standpoint – where pharmaceutical companies are active, instead of relying on wide industry trends.

Conclusions.

In the preceding paragraphs the fascinating CO theory has been tested in industries where the observed increase in prices could have been caused by alternative factors (such as industry concentration) rather than to the presence of common institutional investors in the shareholders' basis of firms active within the same markets. These arguments are even more sound in case of industries, such as the airline and banking, which have been for years on the radar of the antitrust enforcers that so far have not referred to CO as a possible cause of distortive pricing effects. Similarly, there are sectors like the pharmaceutical one in which, in addition to pricing effects, industry innovation is a relevant parameter of competition, and which should be taken into account when assessing the effect of the presence of common shareholders within the share capital of brand *vs.* generic companies.

The complexities highlighted so far suggest, on the one hand, that the CO theory is fascinating, but it may not be well-founded because of the difficulties of identifying *a causal relation* between the presence of minority common shareholders in the corporate structures of competing firms and the claimed anticompetitive effects, which in turn imply that minority shareholders should have the ability to exercise antitrust control upon these competing firms. On the other hand, because of the inherent weakness of the CO theory and of the adequacy of the existing antitrust framework to cope with the potential competitive concerns raised by corporate structures and by mechanisms that connect independent firms, one might even more question the need to introduce radical changes in antitrust law, such as those suggested by eminent doctrine so far. The rigorous enforcement of antitrust rules against CO may be even more inappropriate if, as said, one considers the potential detrimental effects of such approach on the activities of a plethora of financial institutions, that play a fundamental role in modern economies.