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# *Market Concentration and Competitive Intensity as Determinants of Firm Performance*

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## **Abstract**

This paper examines the relationship between market concentration, competition, and firm performance across contemporary industries. Drawing on recent theoretical and empirical contributions, it considers concentration as a multidimensional phenomenon whose consequences depend on market power, productivity, innovation, governance, financing conditions, and sector-specific institutional structures. The literature shows that rising concentration may increase profitability and markups by strengthening firms' pricing and bargaining power, but it may also result from the expansion of highly productive firms and technological advantages. Competition can discipline managers, stimulate investment, improve access to finance, and encourage innovation and strategic adaptation, although excessive competitive pressure may compress margins and reduce expected returns from investment. These relationships are particularly complex in digital platforms, banking, and health care, where network effects, financial intermediation, bargaining structures, and consolidation modify conventional competitive mechanisms. The paper therefore emphasizes that concentration ratios alone provide an incomplete representation of competition. Firm performance depends on whether dominant positions result from productivity improvements, innovation, organizational capabilities, or persistent barriers that weaken market contestability. The findings support an integrated assessment combining concentration, markups, entry, investment, innovation, governance, financing, and industry-specific competitive conditions.

**Keywords:** Market concentration; Competition; Firm performance; Market power; Industrial organization

**JEL classification:** L10; L11; L13; L22; L40

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## **Introduction**

Market concentration has become an increasingly important issue in contemporary industrial economics because structural changes observed across many industries have been accompanied by higher markups, greater profitability among leading firms, declining business dynamism, and substantial differences in investment and productivity. The relationship between concentration and economic performance, however, is not straightforward. Higher concentration may indicate that dominant firms have acquired stronger pricing power or erected barriers that weaken competitive pressure, but it may also result from the expansion of firms possessing superior productivity, technology, organizational capabilities, or economies of scale. The literature examined in this paper accordingly rejects a mechanical interpretation of concentration



ratios. Developments in market shares must be considered alongside entry and exit, markups, productivity, labor shares, innovation, investment, and competitive conduct. These mechanisms are closely connected because changes in competitive structure influence not only product prices and profits but also managerial incentives, resource allocation, access to finance, technological investment, and strategic adaptation. Contemporary industrial structures therefore require a broader framework in which market concentration is treated as one dimension of the competitive environment rather than as a direct and sufficient measure of market power.

The purpose of this paper is to examine how market concentration and competitive intensity influence firm performance and to identify the mechanisms through which these effects vary across firms and industries. Particular attention is given to governance, innovation, corporate investment, financing, liquidity, productivity, and strategic responses because these factors determine how firms transform competitive pressure into financial and operational outcomes. The analysis also considers digital platforms, banking, and health care, where conventional interpretations of competition are complicated by network effects, ecosystem governance, financial intermediation, bilateral bargaining, and consolidation. These sectors demonstrate that similar changes in concentration can generate substantially different outcomes depending on institutional arrangements and the sources of market power. The paper consequently adopts a multi-dimensional perspective in which firm performance results from interactions between industry structure and organizational capabilities. Such an approach also distinguishes improvements generated by efficiency and innovation from gains arising primarily through stronger pricing or bargaining power. By integrating these different strands of research, the paper clarifies why competition can simultaneously promote discipline, investment, and productivity while exposing firms to lower margins, greater financial risk, and stronger pressures for continuous strategic adjustment.

## **1. Market Concentration, Market Power, and Structural Change**

### **1.1. Concentration trends, superstar firms, and structural transformation**

De Loecker et al. (2020) imply that rising concentration in the United States is closely associated with a redistribution of market power toward a relatively small group of firms at the upper end of the markup distribution. Grullon et al. (2019) reinforce this interpretation by showing that industries experiencing stronger concentration also exhibit higher profit margins, abnormal stock returns, and more profitable merger activity, which is consistent with weaker competitive pressure benefiting dominant firms. Barkai (2020) adds a distributional dimension by showing that declines in both labor and capital shares are accompanied by a rising profit share, suggesting that stronger market power allows firms to capture a larger proportion of economic rents. Autor et al. (2020), however, qualify a purely anticompetitive interpretation by demonstrating that rising concentration can also result from sales shifting toward highly productive “superstar” firms characterized by high markups and relatively low labor shares. Taken together, these contributions imply that concentration can increase profitability through several mechanisms that are difficult to separate empirically. Greater dominance may reflect genuine productivity advantages, but it can simultaneously strengthen pricing power and redistribute income away from labor and other productive factors. Market concentration should therefore be interpreted jointly with markups, profits, productivity, and labor-share developments rather than as an independent indicator of competitive deterioration.

Ganapati (2021) implies that higher industrial concentration cannot automatically be interpreted as evidence of weakened competition because concentration is also associated with stronger productivity and output, while corresponding broad-based price increases are less evident. Bessen (2020) provides a related productivity mechanism by showing that proprietary



information technologies can generate scalable firm-specific advantages that allow leading businesses to expand more rapidly than competitors. Rossi-Hansberg et al. (2021) add an important geographic qualification by demonstrating that national concentration can rise while local concentration declines as large firms enter additional geographic markets. Bajgar et al. (2025) broaden the discussion internationally by documenting increasing concentration across Europe and North America, while showing considerable variation across countries and industries. Together, these contributions imply that concentration measures require careful interpretation because the economic meaning of dominance depends on the source, geographic scale, and competitive environment considered. Expansion by efficient firms may raise national concentration without necessarily reducing local consumer choice, while technology-based advantages can improve productivity and simultaneously make market leadership more persistent. Assessing competitive conditions therefore requires combining concentration ratios with evidence on prices, productivity, entry, geographic market structure, and the durability of leading firms' advantages.

Akcigit and Ates (2021) imply that the consequences of concentration become more concerning when increasing dominance is accompanied by weaker entry, lower job reallocation, wider productivity dispersion, and reduced diffusion of knowledge from frontier firms to lagging competitors. This perspective connects with Bessen (2020), who shows that proprietary information technologies can make organizational capabilities difficult to imitate and thereby strengthen the persistence of incumbent advantages. Grullon et al. (2019) further demonstrate that increasing concentration is associated with higher profitability and stronger merger gains, suggesting that established firms may capture increasing rents as competitive pressure weakens. Autor et al. (2020) add that the expansion of highly productive superstar firms can initially generate concentration through efficient reallocation, while simultaneously contributing to lower aggregate labor shares. Considered together, these contributions imply that the long-term implications of concentration depend on whether leading firms remain contestable. Productivity-based dominance may improve output and efficiency, but persistent technological advantages, weaker knowledge diffusion, declining entry, and greater incumbent profitability can progressively reduce competitive turnover. The distinction between efficient concentration and entrenched market power therefore depends on the dynamics of entry, innovation diffusion, firm turnover, and the capacity of competitors to challenge established leaders.

## **1.2. Markups, market power, labor shares, and welfare**

Basu (2019) implies that rising markups should be interpreted cautiously because estimates of market power depend strongly on assumptions regarding production functions, variable inputs, and overhead costs. Berry et al. (2019) reinforce this caution by showing that concentration ratios and aggregate markups are insufficient on their own to establish weakened competition, since substitution patterns, demand conditions, entry barriers, and strategic conduct determine the competitive meaning of observed market structure. Syverson (2019) extends this argument at the macroeconomic level by emphasizing that increasing market power may contribute to declining labor shares, weak investment, high profitability, and reduced business dynamism, but cannot plausibly explain all of these developments by itself. Díez et al. (2021) add an international perspective by documenting increasing corporate markups across numerous countries while showing substantial differences in timing and magnitude. Taken together, these contributions imply that contemporary market-power trends are economically important but empirically heterogeneous. Rising markups may indicate weaker competitive pressure in some settings, yet their interpretation depends on measurement choices and institutional context. Competition should therefore be assessed using several complementary indicators rather than inferred mechanically from a single concentration or markup measure.



Edmond et al. (2023) imply that the welfare effects of market power depend not only on the average level of markups but also on their dispersion across heterogeneous firms, because differences in markups can generate inefficient allocation of production. Kehrig and Vincent (2021) provide a related reallocation mechanism by showing that declining manufacturing labor shares largely reflect activity shifting toward establishments with persistently lower labor shares rather than uniform reductions within all producers. Fernández-Villaverde et al. (2021) extend this dynamic perspective by demonstrating how search complementarities can generate self-reinforcing dominance, whereby initially successful firms attract additional customers and workers and progressively strengthen their market positions. Terranova and Turco (2022) similarly show that cumulative advantages and entry barriers can produce rising concentration, higher markups, greater inequality, and eventually weaker economic growth. Together, these contributions imply that concentration affects economic performance through reallocation as well as direct pricing power. When activity progressively shifts toward firms with distinctive markups, labor shares, or competitive advantages, aggregate outcomes can change substantially even without identical behavioral changes at every firm. The persistence of such reallocation therefore becomes central to understanding how concentration influences productivity, inequality, resource allocation, and long-term growth.

Marshall and Parra (2019) imply that the relationship between competition and innovation is contingent because stronger competitive pressure can either stimulate firms to innovate in order to escape rivals or reduce expected innovation rents. This perspective connects with Fernández-Villaverde et al. (2021), whose framework shows that successful firms can accumulate advantages through search complementarities, potentially reinforcing both product-market dominance and labor-market power. Terranova and Turco (2022) add that technological change and entry barriers can interact dynamically to generate concentrated markets in which higher markups and inequality eventually coexist with weaker macroeconomic performance. Syverson (2019) provides a broader qualification by emphasizing that market power operates alongside technological change, globalization, firm heterogeneity, and measurement issues in explaining contemporary economic trends. Considered together, these contributions imply that competition affects firm performance through mechanisms that vary substantially across industries and technological environments. Market dominance can create resources and rents capable of supporting innovation, but excessive persistence may weaken entry and competitive incentives. The performance consequences of concentration therefore depend on whether dominant positions remain contestable and whether the resulting rents are translated into productive investment and innovation rather than simply preserved through barriers to entry.

### **1.3. Productivity, investment, business dynamism, and growth**

Gutiérrez and Philippon (2017) imply that high profitability does not necessarily translate into stronger productive investment when competitive pressure weakens, since U.S. firms can retain substantial profits without proportionately expanding capacity. Amini et al. (2024) reinforce this disciplinary interpretation by showing that stronger product-market competition encourages investment in both tangible assets and research and development, whereas greater industrial concentration is associated with investment losses. Jiang et al. (2015) provide related evidence from China, where competition stimulates corporate investment and where the resulting expenditures are associated with higher firm value, indicating that competitive pressure can encourage value-enhancing rather than merely excessive spending. Aghion et al. (2019) add a macro-financial dimension by showing that product-market competition influences how effectively monetary easing translates into growth among highly leveraged firms. Taken together, these contributions imply that competition affects corporate performance partly by determin-



ing whether available profits and improved financing conditions are converted into real investment. Firms protected from credible competitive threats may have weaker incentives to expand productive capacity, whereas more competitive environments can strengthen the response of investment to both internal resources and external financial conditions.

Rodríguez-Castelán et al. (2023) imply that domestic market concentration can reduce firm efficiency, since greater regional concentration among Mexican firms is associated with lower total factor productivity, while international trade mitigates part of this negative relationship through stronger competitive pressure. Savagar et al. (2024) qualify this interpretation by showing that concentration can simultaneously be associated with weaker average firm productivity and stronger worker-weighted productivity when activity shifts toward more productive businesses. Decker et al. (2020) provide a related reallocation perspective by demonstrating that U.S. firms have become less responsive to productivity differences, with productive firms expanding less and less productive firms contracting more slowly than in earlier periods. Satpathy and Mishra (2019) add that the productivity benefits of competition depend partly on firms' internal capabilities and resource endowments. Together, these contributions imply that the concentration-productivity relationship operates through both incentive and reallocation channels. Concentration may reflect expansion by efficient firms, but persistent dominance can also weaken competitive discipline and reduce the responsiveness of firms to productivity differences. The resulting effect therefore depends on whether market structure promotes efficient reallocation and whether firms possess sufficient capabilities to translate competitive pressure into productivity improvements.

Silvestrini and Colciago (2022) imply that market structure influences how firms respond to macroeconomic policy because enterprises with stronger market positions adjust pricing, employment, and investment differently following monetary shocks. This perspective connects with Aghion et al. (2019), who show that the growth effects of monetary easing are stronger among leveraged firms when product-market competition is more intense, indicating that competition conditions the transmission of improved financing conditions into real activity. Gutiérrez and Philippon (2017) further show that weak competition can help explain the coexistence of elevated profitability and subdued investment, suggesting that stronger market power may reduce firms' incentives to respond aggressively to favorable economic opportunities. Rodríguez-Castelán et al. (2023) add that external competition from international trade can partially offset productivity losses associated with domestic concentration. Considered together, these contributions imply that competition shapes firm performance dynamically rather than merely influencing static prices and margins. Market structure affects the extent to which firms respond to monetary policy, financing conditions, trade exposure, and investment opportunities. Stronger competitive pressure can therefore improve the transmission of favorable external conditions into productivity and investment, while concentrated structures may weaken those responses.

## **2. Competition as a Driver of Firm-Level Performance**

### **2.1. Governance, managerial discipline, ownership, and firm value**

Babar and Habib (2021) imply that product-market competition often acts as an external governance mechanism by limiting managerial discretion and influencing disclosure, financing, investment, and monitoring decisions. Li and Li (2018) reinforce this disciplinary interpretation by showing that stronger competition reduces opportunities for managerial diversion because inefficient behavior becomes more costly when rivals can capture customers and market share. Dasgupta et al. (2018) extend this mechanism to managerial accountability by demonstrating



that stronger competitive pressure increases the likelihood of CEO turnover when firm performance deteriorates, thereby making relative performance more informative for boards. Rakestraw (2022) adds that competition can partly substitute for weaker internal governance, although the strength of this effect depends on investor-protection arrangements. Taken together, these contributions imply that competition affects firm performance not only through prices and margins but also by changing managerial incentives and the effectiveness of internal monitoring. External competitive pressure can reduce agency problems, sharpen performance evaluation, and compensate for some governance deficiencies. Its contribution nevertheless remains conditional on the institutional environment because competition cannot be expected to discipline firms equally when ownership structures, investor protection, or internal governance mechanisms differ substantially.

Liu et al. (2018) imply that stronger product-market competition does not necessarily improve firm performance because intense rivalry can compress rents and weaken profitability, particularly when firms lack effective internal governance mechanisms. Singla and Singh (2019) reinforce this contingent perspective by showing that the interaction between board monitoring and competition differs between business-group affiliates and stand-alone firms, indicating that organizational structure shapes how external and internal discipline operate together. Sethiya and Thenmozhi (2023) extend the argument to promoter ownership by demonstrating that competitive conditions alter the value implications of ownership concentration among Indian firms. Roy and Chakraborty (2024) further show that intense competition can directly reduce performance through margin pressure while simultaneously strengthening the positive role of concentrated promoter ownership by disciplining controlling shareholders. Together, these contributions imply that competition and corporate governance should not be treated as universally substitutable mechanisms. Competitive pressure can intensify the value of effective ownership and monitoring structures when firms must respond quickly to market threats, but the same pressure can reduce profitability when firms lack adequate strategic or governance capacity. Firm performance therefore reflects interactions between ownership concentration, board oversight, organizational form, and the intensity of product-market rivalry.

Chang and Jo (2019) imply that the value consequences of employee-friendly corporate policies depend on the degree of product-market competition because investments in human capital generate benefits only when firms can translate employee commitment and productivity into competitive advantage. This perspective connects with Liu et al. (2018), who show that governance quality moderates the adverse performance effects that can emerge when intense competition compresses rents. Babar and Habib (2021) provide the broader interpretation that competitive pressure interacts with multiple dimensions of corporate behavior rather than exerting a uniform effect across firms. Singla and Singh (2019) similarly demonstrate that organizational context determines whether board monitoring becomes more or less effective under stronger rivalry. Considered together, these contributions imply that competition conditions the returns generated by internal organizational resources and governance arrangements. Firms with stronger monitoring, more appropriate ownership structures, or effective human-capital policies may be better positioned to convert competitive pressure into efficiency and value creation, whereas weaker organizational structures can leave firms exposed primarily to declining margins. The performance consequences of competition are therefore heterogeneous because external rivalry interacts with the internal capacity of firms to adapt, monitor managers, and deploy organizational resources effectively.



## **2.2. Innovation, CSR, investment, and strategic adaptation**

Flammer (2015) implies that stronger product-market competition can encourage firms to increase corporate social responsibility when stakeholder-oriented practices serve as instruments of differentiation under intensified rivalry. Han et al. (2018) qualify this mechanism by showing that CSR expenditures do not produce uniform performance consequences across competitive environments, with adverse effects concentrated more strongly in relatively noncompetitive industries and governance conditions altering these relationships. Tsendsuren et al. (2021) add a capability dimension by demonstrating that competitive pressure can constrain both profitability and environmental expenditure, while managerial competency helps firms reconcile environmental responsibility with financial objectives. Ha and Tran (2022) further show that competition can improve firm performance partly through stronger corporate governance, indicating that external rivalry may stimulate internal monitoring and organizational adjustment. Taken together, these contributions imply that competition influences stakeholder-oriented corporate behavior through both disciplinary and strategic channels. Rivalry can discourage inefficient CSR spending while encouraging firms to invest in environmental or social practices that strengthen differentiation and stakeholder relationships. The resulting financial effects depend on governance quality and managerial capability, since firms must distinguish between sustainability expenditures that support competitive positioning and those that impose costs without corresponding strategic benefits.

Im et al. (2015) imply that the relationship between competition and innovation is non-linear, since moderate increases in rivalry raise the value of innovative activity while excessive competition eventually weakens the returns generated by innovation. Gu (2016) reinforces this contingent perspective by showing that competitive pressure changes the risk and expected-return characteristics of R&D-intensive firms, linking product-market conditions to both technological investment and capital-market valuation. Yung and Nguyen (2020) add that managerial ability determines how successfully firms respond to competitive threats, with more capable managers increasing R&D, innovation, market share, and firm value under stronger rivalry. Igami and Uetake (2020) broaden the argument by showing that merger activity, entry, exit, and innovation incentives are jointly determined within evolving industrial structures. Together, these contributions imply that competition affects innovation through incentives, managerial capabilities, and expectations about future market structure rather than through a single linear mechanism. Firms facing moderate competitive pressure may have stronger incentives to innovate, but excessive rivalry can reduce expected rents, while consolidation can alter both technological strategies and entry incentives. Innovation outcomes therefore depend on the interaction between competitive intensity, managerial quality, financing risks, and the structure of the industry.

Cunningham et al. (2021) imply that consolidation can weaken innovation when incumbent firms acquire overlapping innovative projects and subsequently terminate their development, thereby eliminating potential future competitors. Igami and Uetake (2020) provide a broader structural interpretation by showing that mergers influence innovation, entry, and exit simultaneously, meaning that the consequences of consolidation extend beyond immediate changes in market shares or prices. Yung and Nguyen (2020) further demonstrate that firms differ substantially in their capacity to respond to competitive threats because managerial ability affects innovation intensity, market-share gains, and value creation. Flammer (2015) adds that firms may also adapt to stronger rivalry through non-price strategies such as CSR, using stakeholder-oriented investments to differentiate themselves when conventional competition intensifies. Considered together, these contributions imply that the performance effects of market structure depend heavily on the strategic responses available to firms. Competition can stimulate innovation and differentiation when managers possess sufficient capabilities and when potential rivals



remain able to challenge incumbents. Consolidation becomes more problematic when acquisitions suppress emerging technologies or weaken entry threats. Market structure should therefore be evaluated dynamically, with attention to innovation incentives, managerial adaptation, strategic differentiation, and the preservation of future competitive pressure.

### **2.3. Financing, liquidity, transaction costs, and operational performance**

Abdoh and Varela (2018) imply that the performance consequences of product-market competition depend strongly on firms' financial flexibility, since competitive pressure can stimulate valuable investment among unconstrained firms while suppressing investment when financing constraints prevent an adequate strategic response. Chi and Su (2016) reinforce this interpretation by showing that cash holdings become more valuable under predatory competitive threats because internal liquidity allows firms to preserve investment and operating policies when rivals attempt to exploit financial weakness. Lyandres and Palazzo (2016) extend this mechanism to innovative firms, demonstrating that financially constrained businesses hold additional cash partly to sustain future innovation commitments under competitive uncertainty. Boubaker et al. (2018) add a debt-structure dimension by showing that competition affects reliance on bank debt, particularly among financially constrained firms and those with weaker governance. Taken together, these contributions imply that competition creates both incentives to invest and greater demands for financial flexibility. Firms possessing sufficient liquidity or access to appropriate financing can respond strategically to rivalry, whereas constrained firms may lose competitive ground because fixed debt obligations or insufficient internal resources restrict their ability to adjust. Corporate financial policy therefore becomes an important component of competitive strategy.

Platt (2020) implies that stronger product-market competition can increase corporate borrowing costs because creditors require larger bond spreads when rivalry raises the probability and consequences of business failure, particularly for firms with assets that are difficult to redeploy. Zheng et al. (2021), however, show that competition can reduce the cost of equity by improving the information environment and constraining managerial opportunism, especially when information asymmetry is initially high. Zhang et al. (2022) add that competitive threats also influence how investors value corporate cash because stronger external discipline can limit managerial misuse of liquid resources. Chi and Su (2016) complement this agency perspective by showing that cash retains strategic value when firms need liquidity to withstand predatory behavior from competitors. Together, these contributions imply that competition affects different financing instruments through distinct channels. Debt investors may demand compensation for greater operating and liquidation risk, while equity investors may benefit from improved information and stronger external discipline. The value of internal liquidity likewise depends on whether cash primarily protects strategic flexibility or creates opportunities for managerial inefficiency. Competitive intensity therefore influences the cost and value of corporate finance through interacting risk, information, governance, and strategic-liquidity mechanisms.

Touil et al. (2024) imply that firms can strengthen financial performance under competitive conditions by improving supply-chain coordination, integrating sustainability and quality practices, and reducing transaction costs rather than relying exclusively on market power. Choukar et al. (2021) provide a related organizational mechanism by showing that transparency, contractual relationships, and stakeholder-oriented practices can reduce transaction frictions and support competitiveness and financial stability among Moroccan SMEs. Zheng et al. (2021) add that competitive markets can lower equity financing costs through improved information and reduced managerial opportunism, suggesting that external market discipline can complement internal organizational improvements. Abdoh and Varela (2018) further demonstrate that firms need sufficient financial capacity to translate competitive pressure into productive investment.



Considered together, these contributions imply that the effects of competition on performance depend not only on industry structure but also on firms' ability to organize transactions, maintain credible stakeholder relationships, access finance, and invest strategically. Competitive advantage can therefore emerge from lower organizational frictions and stronger coordination as well as from pricing power. Firms that combine efficient internal processes with adequate financial flexibility appear better positioned to transform market rivalry into sustainable financial performance.

### **3. Competition and Performance in Contemporary Industries**

#### **3.1. Digital platforms, algorithms, and ecosystem competition**

Cennamo (2021) implies that concentration in digital markets cannot be interpreted adequately through conventional market-share measures because network effects, multihoming, ecosystem complementarities, and platform architecture fundamentally alter competitive relationships. Hagiu and Wright (2015) provide the organizational foundation for this interpretation by showing that multi-sided platforms differ from conventional resellers and vertically integrated firms because performance depends on how interactions and control rights are allocated among several user groups. Rietveld and Schilling (2021) reinforce this relational perspective by identifying network effects, ecosystem governance, pricing, architecture, and complementor participation as central determinants of platform competition. Rahaman et al. (2022) add that market power must be evaluated simultaneously across the different sides of a platform because pricing or participation decisions affecting one group influence demand and performance on another. Taken together, these contributions imply that high digital concentration may reflect powerful network advantages without necessarily producing identical competitive outcomes across ecosystems. Platform performance depends on sustaining participation among users and complementors while preserving sufficient control to coordinate interactions. Competition policy should therefore consider multihoming possibilities, governance rules, cross-side dependencies, and ecosystem contestability rather than inferring market power solely from aggregate concentration ratios.

Zhu and Liu (2018) imply that dominant platforms can influence complementor performance not only through access conditions but also by entering product categories in which independent sellers have already demonstrated commercial potential. Wen and Zhu (2019) extend this mechanism by showing that the mere threat of platform-owner entry changes developers' innovation and product strategies, meaning that competitive effects arise even before direct entry occurs. Foerderer et al. (2018), however, demonstrate that platform entry does not necessarily crowd out independent producers, since entry can stimulate innovation when it increases market attention or strengthens incentives for differentiation. Motta and Peitz (2021) add an acquisition dimension by showing that purchases of start-ups by dominant digital firms may either generate complementarities or eliminate future competitive threats. Together, these contributions imply that platform dominance has ambiguous consequences for innovation and complementor performance. Ecosystem owners possess informational and infrastructural advantages that can make independent firms strategically vulnerable, yet the same interventions can expand demand or encourage differentiation. Assessing competitive harm therefore requires distinguishing between entry or acquisitions that strengthen ecosystem productivity and those that reduce future contestability. The relevant question is not simply whether dominant platforms expand, but how their expansion changes complementors' incentives to innovate and remain within the ecosystem.



Calvano et al. (2020) imply that digitalization can weaken effective competition even without explicit collusion because autonomous pricing algorithms may learn strategies that sustain supra-competitive profits through repeated interaction. This mechanism broadens the concentration-performance debate by showing that market power can emerge from technological coordination as well as from conventional structural dominance. Cennamo (2021) provides a complementary platform perspective by emphasizing that digital competitive advantage depends on network effects and ecosystem architecture, which can reinforce incumbent positions even when multiple nominal competitors remain present. Rietveld and Schilling (2021) further show that dominant platforms must balance rent extraction against the need to retain users and complementors, suggesting that excessive appropriation can weaken ecosystem participation over time. Motta and Peitz (2021) add that acquisitions of potential competitors can reinforce dominance when transactions remove emerging competitive threats rather than create genuine complementarities. Considered together, these contributions imply that digital market power can be sustained through several mutually reinforcing mechanisms, including algorithmic pricing, network effects, ecosystem control, and strategic acquisitions. Competitive assessment should therefore move beyond static concentration and examine technological coordination, platform governance, innovation incentives, and the preservation of credible future entry.

### **3.2. Banking competition, stability, access to finance, and innovation**

Leroy and Lucotte (2017) imply that the effect of banking competition depends critically on the level at which stability is assessed, since stronger competition can weaken individual-bank stability while simultaneously reducing systemic risk through greater diversification of exposures. Kasman and Kasman (2015) reinforce this distinction by showing that concentration and competition are not simple opposites and that increased concentration can adversely affect bank stability depending on the indicator employed. Goetz (2018) adds that actual competitive pressure should be distinguished from static market concentration, using geographic variation to show that competition affects both bank risk taking and stability. Tan (2016) further demonstrates that the relationship between competition and profitability is conditioned by operating efficiency, capitalization, regulation, and risk management. Taken together, these contributions imply that banking performance cannot be inferred from concentration ratios alone. Competitive environments may improve efficiency or diversification while simultaneously placing pressure on margins and individual-bank risk profiles. The consequences therefore depend on how competition is measured, how banks adapt their strategies, and whether the objective is firm-level profitability, institutional stability, or system-wide resilience.

Cornaggia et al. (2015) imply that banking competition affects real-sector performance by influencing firms' ability to finance innovation, particularly projects characterized by high uncertainty and weak collateral. Love and Martínez Pería (2015) reinforce this transmission mechanism by showing that stronger banking competition generally improves access to external finance in developing economies, especially where financing constraints are severe. Léon (2015) similarly demonstrates that increased competition can alleviate credit constraints, although the magnitude of the effect depends on institutional and informational conditions. Clerides et al. (2015) provide an important methodological qualification by showing that concentration ratios alone do not adequately capture the actual exercise of market power in banking. Together, these contributions imply that the structure of financial intermediation affects firm performance through the availability and terms of external finance. Greater competitive pressure among banks can expand credit access and support innovative investment, but these benefits depend on institutional quality and on whether competition is measured through pricing conduct and



market power rather than market shares alone. Banking competition therefore influences corporate outcomes indirectly by shaping the financing environment in which firms make investment, expansion, and innovation decisions.

Azar et al. (2022) imply that competitive conditions in banking can be affected by common ownership structures even when conventional market-share concentration remains unchanged. This perspective broadens the interpretation of market power by showing that nominally separate banks may face altered competitive incentives when the same institutional investors hold substantial stakes across several firms. Clerides et al. (2015) reinforce the need for broader measurement by distinguishing observed concentration from pricing conduct and actual market power. Kasman and Kasman (2015) similarly demonstrate that concentration and competition can have different relationships with financial stability, indicating that the two concepts should not be used interchangeably. Tan (2016) adds that bank profitability is influenced by efficiency, capitalization, risk management, and regulatory conditions alongside competitive structure. Considered together, these contributions imply that assessments of banking competition should incorporate ownership links, conduct-based indicators, institutional characteristics, and risk profiles rather than rely exclusively on concentration ratios. A market containing several banks may still exhibit weak competitive incentives when ownership structures align shareholder interests across competitors, while a concentrated market does not necessarily generate identical profitability or stability outcomes across institutions.

### **3.3. Healthcare, consumer industries, and consolidation**

Cooper et al. (2019) imply that concentration in hospital markets can strengthen provider bargaining power and translate directly into higher negotiated prices, showing that improved financial outcomes for firms may coexist with greater costs for purchasers and consumers. Gaynor et al. (2015) place this result within a broader health-care framework by showing that competition influences prices, quality, insurer negotiations, and provider incentives, while emphasizing that outcomes depend on payment systems and institutional arrangements. Dafny et al. (2019) extend the bargaining perspective beyond narrowly defined local markets by demonstrating that cross-market hospital mergers can raise prices even when merging providers are not direct local competitors, because larger systems acquire stronger negotiating leverage with insurers. Fulton (2017) further documents that consolidation has become widespread across hospital, physician, and insurance markets, frequently producing highly concentrated local structures. Taken together, these contributions imply that concentration in health care affects firm performance largely through bargaining relationships rather than through product-market pricing alone. Greater organizational scale can strengthen providers' negotiating position and revenues, but such gains may be accompanied by higher expenditure, weaker entry, and reduced consumer welfare. Competitive assessment therefore requires attention to bargaining networks, institutional structure, and cross-market system organization.

Trish and Herring (2015) imply that the consequences of concentration in health care depend on relative rather than absolute market power because insurer concentration affects premiums differently depending on the bargaining strength of hospitals. This bilateral perspective complements Cooper et al. (2019), who show that concentrated hospital markets enable providers to secure substantially higher prices from private insurers. Dafny et al. (2019) further demonstrate that provider systems can increase bargaining leverage across geographically distinct markets, indicating that concentration measures based solely on local overlap may understate competitive effects. Fulton (2017) adds that consolidation has occurred simultaneously across insurers, physicians, and hospitals, creating vertically connected markets in which several forms of bargaining power interact. Together, these contributions imply that firm performance in health-care markets emerges from negotiations among multiple concentrated actors rather



than from a simple relationship between seller concentration and consumer prices. A more concentrated insurer may obtain stronger terms from providers while also exercising greater pricing power over customers, whereas a dominant hospital system may capture a larger share of those gains through negotiations. Evaluating competition therefore requires examining the relative strength of each side of the market and the institutional arrangements governing their interactions.

Miller and Weinberg (2017) imply that consolidation can improve producer profitability through altered strategic pricing incentives and stronger coordinated market power rather than solely through cost efficiencies. Ashenfelter et al. (2015) provide a complementary interpretation by showing that mergers can simultaneously create efficiencies and weaken competitive pricing, meaning that welfare consequences depend on the size and pass-through of both effects. Dennis et al. (2022) introduce an important methodological qualification by demonstrating that observed relationships between common ownership and airline prices can reflect underlying market-share patterns rather than ownership links themselves. Gaynor et al. (2015) similarly emphasize that concentration measures require interpretation within the specific institutional and competitive conditions of each industry. Considered together, these contributions imply that concentration-performance relationships cannot be inferred mechanically from merger activity, ownership structures, or market shares. Consolidation may raise profitability because of genuine efficiencies, stronger bargaining positions, or reduced competitive pressure, and distinguishing among these mechanisms is essential for evaluating welfare consequences. Empirical assessment should therefore separate structural concentration from actual competitive conduct and identify whether stronger firm performance results from productivity improvements or from the ability to charge higher prices.

#### **4. Discussion**

The literature reviewed indicates first that the relationship between market concentration and firm performance cannot be interpreted independently of the mechanisms producing concentration. De Loecker et al. (2020) associate increasing concentration with rising markups and a redistribution of market power toward firms located at the upper end of the markup distribution, while Grullon et al. (2019) show that more concentrated industries tend to exhibit higher profit margins and more profitable merger activity. Barkai (2020) similarly relates the increasing profit share to changes in the distribution of economic rents. Nevertheless, Autor et al. (2020) provide a different explanation by showing that concentration may increase because highly productive superstar firms progressively capture larger market shares. Ganapati (2021) further demonstrates that higher concentration may coexist with productivity and output gains without equivalent broad increases in prices. These results indicate that superior firm performance under concentrated market structures can originate either from market power or from productive advantages. This distinction has major implications because profitability resulting from innovation, scale, or efficiency does not have the same welfare consequences as profitability resulting from persistent restrictions on competition. Akcigit and Ates (2021) therefore provide an important qualification by connecting persistent dominance with weaker entry, reduced knowledge diffusion, and lower business dynamism.

A second result concerns the role of competition as a disciplinary and strategic force within firms. Babar and Habib (2021) describe product-market competition as an external governance mechanism capable of limiting managerial discretion, while Li and Li (2018) show that competition increases the cost of managerial inefficiency by exposing firms more directly to the loss of customers and market share. Dasgupta et al. (2018) similarly find stronger sensitivity of CEO turnover to poor performance when competitive pressure is greater. These mechanisms suggest that competition can improve firm performance without necessarily operating through lower



prices alone. Its effects extend to managerial monitoring, investment decisions, organizational efficiency, and resource allocation. Nevertheless, the effects are conditional. Liu et al. (2018) show that excessive competitive pressure may reduce profitability when firms cannot compensate for compressed rents through effective governance or stronger capabilities. Yung and Nguyen (2020) demonstrate that managerial ability can determine whether firms respond to rivalry through greater R&D, innovation, market-share expansion, and value creation. Flammer (2015) likewise shows that firms may employ CSR strategically as a differentiation mechanism when rivalry intensifies. Competition therefore generates heterogeneous outcomes because its contribution to performance depends on how effectively firms reorganize their resources, managerial structures, innovation strategies, and stakeholder relationships.

The sectoral evidence further demonstrates why competition must be interpreted within specific institutional and technological environments. In digital markets, Cennamo (2021) and Rietveld and Schilling (2021) show that network effects, ecosystem governance, multihoming, complementor participation, and platform architecture modify conventional competitive relationships. Zhu and Liu (2018) and Wen and Zhu (2019) further indicate that dominant platforms can influence complementors' innovation strategies through actual or anticipated entry, while Calvano et al. (2020) demonstrate that pricing algorithms may sustain supra-competitive outcomes even without conventional explicit collusion. Banking presents a different mechanism. Love and Martínez Pería (2015) and León (2015) associate stronger banking competition with improved access to external finance, whereas Leroy and Lucotte (2017) show that the consequences for individual-bank and systemic stability may differ. Health care provides another configuration in which bargaining power is central. Cooper et al. (2019) and Dafny et al. (2019) show that hospital consolidation can raise negotiated prices by strengthening provider bargaining positions, while Trish and Herring (2015) emphasize the importance of relative power between insurers and providers. Across these sectors, concentration influences performance through different mechanisms, confirming that competitive assessment requires attention to conduct, institutions, technology, bargaining relationships, and entry conditions rather than concentration alone.

## Conclusion

This paper shows that the relationship between market concentration, competition, and firm performance is fundamentally conditional rather than uniform. Concentrated industries can provide dominant firms with stronger pricing and bargaining power, higher margins, and greater ability to appropriate economic rents. At the same time, concentration can emerge from productivity improvements, technological advantages, economies of scale, or the expansion of firms capable of serving markets more efficiently. The distinction between these mechanisms is essential for interpreting firm performance. Competition can strengthen managerial discipline, encourage investment, support innovation, improve resource allocation, and stimulate firms to develop new organizational and strategic capabilities. However, very strong rivalry can also compress profits, increase financial risk, reduce expected innovation rents, and constrain firms that lack sufficient liquidity, governance quality, or managerial capacity. The evidence therefore does not support a simple proposition according to which either concentration or competition systematically improves performance. Their consequences depend on market contestability, the durability of incumbent advantages, organizational resources, financing conditions, and the capacity of firms to respond productively to competitive pressure.

The analysis also demonstrates that contemporary industries increasingly require sector-specific approaches to competition. Digital platforms are shaped by network effects, ecosystems, algorithms, and the strategic position of complementors; banking competition operates through access to finance, risk, information, and financial stability; and health-care competition depends



heavily on bargaining relationships among hospitals, insurers, physicians, and patients. These differences limit the usefulness of concentration ratios when they are interpreted in isolation. A more complete evaluation should combine structural indicators with markups, entry and exit, productivity, innovation, investment, ownership, financing costs, bargaining power, and institutional characteristics. From a policy perspective, the central issue is consequently not concentration itself but whether dominant positions remain contestable and whether superior firm performance originates from efficiency and innovation or from barriers that restrict competitive pressure. Future research could further examine how technological transformation, common ownership, artificial intelligence, platform expansion, and changing financial structures modify this relationship. Such developments are likely to make the distinction between productive dominance and entrenched market power increasingly important for assessing both corporate performance and broader economic welfare.

## References

1. Abdoh, H. A. A., & Varela, O. (2018). Product market competition, cash flow and corporate investments. *Managerial Finance*, 44(2), 207–221. DOI: 10.1108/MF-03-2017-0072.
2. Aghion, P., Farhi, E., & Kharroubi, E. (2019). Monetary policy, product market competition and growth. *Economica*, 86(343), 431–470. DOI: 10.1111/ecca.12311.
3. Akcigit, U., & Ates, S. T. (2021). Ten facts on declining business dynamism and lessons from endogenous growth theory. *American Economic Journal: Macroeconomics*, 13(1), 257–298. DOI: 10.1257/mac.20180449.
4. Amini, S., Kumar, R., & Shome, D. (2024). Product market competition and corporate investment: An empirical analysis. *International Review of Economics & Finance*, 94, Article 103405. DOI: 10.1016/j.iref.2024.103405.
5. Ashenfelter, O. C., Hosken, D. S., & Weinberg, M. C. (2015). Efficiencies brewed: Pricing and consolidation in the US beer industry. *RAND Journal of Economics*, 46(2), 328–361. DOI: 10.1111/1756-2171.12092.
6. Autor, D., Dorn, D., Katz, L. F., Patterson, C., & Van Reenen, J. (2020). The fall of the labor share and the rise of superstar firms. *Quarterly Journal of Economics*, 135(2), 645–709. DOI: 10.1093/qje/qjaa004.
7. Azar, J., Raina, S., & Schmalz, M. (2022). Ultimate ownership and bank competition. *Financial Management*, 51(1), 227–269. DOI: 10.1111/fima.12368.
8. Babar, M., & Habib, A. (2021). Product market competition in accounting, finance, and corporate governance: A review of the literature. *International Review of Financial Analysis*, 73, Article 101607. DOI: 10.1016/j.irfa.2020.101607.
9. Bajgar, M., Berlingieri, G., Calligaris, S., Criscuolo, C., & Timmis, J. (2025). Industry concentration in Europe and North America. *Industrial and Corporate Change*, 34(3), 407–424. DOI: 10.1093/icc/dtac059.
10. Barkai, S. (2020). Declining labor and capital shares. *Journal of Finance*, 75(5), 2421–2463. DOI: 10.1111/jofi.12909.
11. Basu, S. (2019). Are price-cost markups rising in the United States? A discussion of the evidence. *Journal of Economic Perspectives*, 33(3), 3–22. DOI: 10.1257/jep.33.3.3.
12. Berry, S., Gaynor, M., & Scott Morton, F. (2019). Do increasing markups matter? Lessons from empirical industrial organization. *Journal of Economic Perspectives*, 33(3), 44–68. DOI: 10.1257/jep.33.3.44.
13. Bessen, J. (2020). Industry concentration and information technology. *Journal of Law and Economics*, 63(3), 531–555. DOI: 10.1086/708936.
14. Boubaker, S., Saffar, W., & Sassi, S. (2018). Product market competition and debt choice. *Journal of Corporate Finance*, 49, 204–224. DOI: 10.1016/j.jcorpfin.2018.01.007.



15. Calvano, E., Calzolari, G., Denicolò, V., & Pastorello, S. (2020). Artificial intelligence, algorithmic pricing, and collusion. *American Economic Review*, 110(10), 3267–3297. DOI: 10.1257/aer.20190623.
16. Cennamo, C. (2021). Competing in digital markets: A platform-based perspective. *Academy of Management Perspectives*, 35(2), 265–291. DOI: 10.5465/amp.2016.0048.
17. Chang, S., & Jo, H. (2019). Employee-friendly practices, product market competition and firm value. *Journal of Business Finance & Accounting*, 46(1–2), 200–224. DOI: 10.1111/jbfa.12353.
18. Chi, J. D., & Su, X. (2016). Product market threats and the value of corporate cash holdings. *Financial Management*, 45(3), 705–735. DOI: 10.1111/fima.12119.
19. Choukar, E., El Hamidi, N., Ait Hbib, A., & Makhrouf, S. (2021). CSR and financial performance: Are CSR practices a factor in reducing transaction costs? *International Journal of Economic Studies and Management*, 1(2), 307–320. DOI: 10.5281/zenodo.11473043.
20. Clerides, S., Delis, M. D., & Kokas, S. (2015). A new data set on competition in national banking markets. *Financial Markets, Institutions & Instruments*, 24(2–3), 267–311. DOI: 10.1111/fmii.12030.
21. Cooper, Z., Craig, S. V., Gaynor, M., & Van Reenen, J. (2019). The price ain't right? Hospital prices and health spending on the privately insured. *Quarterly Journal of Economics*, 134(1), 51–107. DOI: 10.1093/qje/qjy020.
22. Cornaggia, J., Mao, Y., Tian, X., & Wolfe, B. (2015). Does banking competition affect innovation? *Journal of Financial Economics*, 115(1), 189–209. DOI: 10.1016/j.jfineco.2014.09.001.
23. Cunningham, C., Ederer, F., & Ma, S. (2021). Killer acquisitions. *Journal of Political Economy*, 129(3), 649–702. DOI: 10.1086/712506.
24. Dafny, L., Ho, K., & Lee, R. S. (2019). The price effects of cross-market mergers: Theory and evidence from the hospital industry. *RAND Journal of Economics*, 50(2), 286–325. DOI: 10.1111/1756-2171.12270.
25. Dasgupta, S., Li, X., & Wang, A. Y. (2018). Product market competition shocks, firm performance, and forced CEO turnover. *Review of Financial Studies*, 31(11), 4187–4231. DOI: 10.1093/rfs/hhx129.
26. De Loecker, J., Eeckhout, J., & Unger, G. (2020). The rise of market power and the macroeconomic implications. *Quarterly Journal of Economics*, 135(2), 561–644. DOI: 10.1093/qje/qjz041.
27. Decker, R. A., Haltiwanger, J., Jarmin, R. S., & Miranda, J. (2020). Changing business dynamism and productivity: Shocks versus responsiveness. *American Economic Review*, 110(12), 3952–3990. DOI: 10.1257/aer.20190680.
28. Dennis, P., Gerardi, K., & Schenone, C. (2022). Common ownership does not have anticompetitive effects in the airline industry. *Journal of Finance*, 77(5), 2765–2798. DOI: 10.1111/jofi.13176.
29. Díez, F. J., Fan, J., & Villegas-Sánchez, C. (2021). Global declining competition? *Journal of International Economics*, 132, Article 103492. DOI: 10.1016/j.jinteco.2021.103492.
30. Edmond, C., Midrigan, V., & Xu, D. Y. (2023). How costly are markups? *Journal of Political Economy*, 131(7), 1619–1675. DOI: 10.1086/722986.
31. Fernández-Villaverde, J., Mandelman, F., Yu, Y., & Zanetti, F. (2021). The “Matthew effect” and market concentration: Search complementarities and monopsony power. *Journal of Monetary Economics*, 121, 62–90. DOI: 10.1016/j.jmoneco.2021.04.005.
32. Flammer, C. (2015). Does product market competition foster corporate social responsibility? Evidence from trade liberalization. *Strategic Management Journal*, 36(10), 1469–1485. DOI: 10.1002/smj.2307.
33. Foerderer, J., Kude, T., Mithas, S., & Heinzl, A. (2018). Does platform owner's entry crowd out innovation? Evidence from Google Photos. *Information Systems Research*, 29(2), 444–460. DOI: 10.1287/isre.2018.0787.



34. Fulton, B. D. (2017). Health care market concentration trends in the United States: Evidence and policy responses. *Health Affairs*, 36(9), 1530–1538. DOI: 10.1377/hlthaff.2017.0556.
35. Ganapati, S. (2021). Growing oligopolies, prices, output, and productivity. *American Economic Journal: Microeconomics*, 13(3), 309–327. DOI: 10.1257/mic.20190029.
36. Gaynor, M., Ho, K., & Town, R. J. (2015). The industrial organization of health-care markets. *Journal of Economic Literature*, 53(2), 235–284. DOI: 10.1257/jel.53.2.235.
37. Goetz, M. R. (2018). Competition and bank stability. *Journal of Financial Intermediation*, 35, 57–69. DOI: 10.1016/j.jfi.2017.06.001.
38. Grullon, G., Larkin, Y., & Michaely, R. (2019). Are US industries becoming more concentrated? *Review of Finance*, 23(4), 697–743. DOI: 10.1093/rof/rfz007.
39. Gu, L. (2016). Product market competition, R&D investment, and stock returns. *Journal of Financial Economics*, 119(2), 441–455. DOI: 10.1016/j.jfineco.2015.09.008.
40. Gutiérrez, G., & Philippon, T. (2017). Investmentless growth: An empirical investigation. *Brookings Papers on Economic Activity*, 2017(2), 89–190. DOI: 10.1353/eca.2017.0013.
41. Ha, T. X., & Tran, T. T. (2022). The impact of product market competition on firm performance through the mediating of corporate governance index: Empirical evidence from listed companies in Vietnam. *Cogent Business & Management*, 9(1), Article 2129356. DOI: 10.1080/23311975.2022.2129356.
42. Hagiu, A., & Wright, J. (2015). Multi-sided platforms. *International Journal of Industrial Organization*, 43, 162–174. DOI: 10.1016/j.ijindorg.2015.03.003.
43. Han, W., Yu, Z., & Li, J. (2018). Corporate social responsibility, product market competition, and product market performance. *International Review of Economics & Finance*, 56, 75–91. DOI: 10.1016/j.iref.2018.03.019.
44. Igami, M., & Uetake, K. (2020). Mergers, innovation, and entry-exit dynamics: Consolidation of the hard disk drive industry, 1996–2016. *Review of Economic Studies*, 87(6), 2672–2702. DOI: 10.1093/restud/rdz044.
45. Im, H. J., Park, Y. J., & Shon, J. (2015). Product market competition and the value of innovation: Evidence from US patent data. *Economics Letters*, 137, 78–82. DOI: 10.1016/j.econlet.2015.10.017.
46. Jiang, F., Kim, K. A., Nofsinger, J. R., & Zhu, B. (2015). Product market competition and corporate investment: Evidence from China. *Journal of Corporate Finance*, 35, 196–210. DOI: 10.1016/j.jcorpfin.2015.09.004.
47. Kasman, S., & Kasman, A. (2015). Bank competition, concentration and financial stability in the Turkish banking industry. *Economic Systems*, 39(3), 502–517. DOI: 10.1016/j.ecosys.2014.12.003.
48. Kehrig, M., & Vincent, N. (2021). The micro-level anatomy of the labor share decline. *Quarterly Journal of Economics*, 136(2), 1031–1087. DOI: 10.1093/qje/qjab002.
49. Léon, F. (2015). Does bank competition alleviate credit constraints in developing countries? *Journal of Banking & Finance*, 57, 130–142. DOI: 10.1016/j.jbankfin.2015.04.005.
50. Leroy, A., & Lucotte, Y. (2017). Is there a competition-stability trade-off in European banking? *Journal of International Financial Markets, Institutions and Money*, 46, 199–215. DOI: 10.1016/j.intfin.2016.08.009.
51. Li, G., & Li, J. (2018). Managerial diversion, product market competition, and firm performance. *China Economic Review*, 50, 240–264. DOI: 10.1016/j.chieco.2018.04.009.
52. Liu, L., Qu, W., & Haman, J. (2018). Product market competition, state-ownership, corporate governance and firm performance. *Asian Review of Accounting*, 26(1), 62–83. DOI: 10.1108/ARA-05-2017-0080.
53. Love, I., & Martínez Pería, M. S. (2015). How bank competition affects firms' access to finance. *World Bank Economic Review*, 29(3), 413–448. DOI: 10.1093/wber/lhu003.



54. Lyandres, E., & Palazzo, B. (2016). Cash holdings, competition, and innovation. *Journal of Financial and Quantitative Analysis*, 51(6), 1823–1861. DOI: 10.1017/S0022109016000697.
55. Marshall, G., & Parra, Á. (2019). Innovation and competition: The role of the product market. *International Journal of Industrial Organization*, 65, 221–247. DOI: 10.1016/j.ijindorg.2019.04.001.
56. Miller, N. H., & Weinberg, M. C. (2017). Understanding the price effects of the MillerCoors joint venture. *Econometrica*, 85(6), 1763–1791. DOI: 10.3982/ECTA13333.
57. Motta, M., & Peitz, M. (2021). Big tech mergers. *Information Economics and Policy*, 54, Article 100868. DOI: 10.1016/j.infoecopol.2020.100868.
58. Platt, K. (2020). Corporate bonds and product market competition. *Journal of Financial Research*, 43(3), 615–647. DOI: 10.1111/jfir.12220.
59. Rahaman, M. M., Zhang, M., & Feng, J. (2022). Two-sided market power and firm performance. *Journal of Business Research*, 150, 585–605. DOI: 10.1016/j.jbusres.2022.06.026.
60. Rakestraw, J. R. (2022). Investor protection and the substitution effect of corporate governance and product market competition on firm value. *Journal of Accounting, Auditing & Finance*, 37(3), 678–699. DOI: 10.1177/0148558X20936792.
61. Rietveld, J., & Schilling, M. A. (2021). Platform competition: A systematic and interdisciplinary review of the literature. *Journal of Management*, 47(6), 1528–1563. DOI: 10.1177/0149206320969791.
62. Rodríguez-Castelán, C., López-Calva, L. F., & Barriga-Cabanillas, O. (2023). Market concentration, trade exposure, and firm productivity in developing countries: Evidence from Mexico. *World Development*, 165, Article 106199. DOI: 10.1016/j.worlddev.2023.106199.
63. Rossi-Hansberg, E., Sarte, P.-D., & Trachter, N. (2021). Diverging trends in national and local concentration. *NBER Macroeconomics Annual*, 35, 115–150. DOI: 10.1086/712317.
64. Roy, U., & Chakraborty, I. (2024). Market concentration, promoter ownership and firm performance: Evidence from Indian corporate firms. *Indian Economic Review*, 59(1), 27–85. DOI: 10.1007/s41775-024-00217-z.
65. Satpathy, L. D., & Mishra, B. R. (2019). Size-competition-productivity nexus: Evidence from Indian manufacturing firms. *South Asia Economic Journal*, 20(2), 303–321. DOI: 10.1177/1391561419859185.
66. Savagar, A., Aguda, O., Galanakis, Y., & Wu, J. (2024). Market concentration and productivity: Evidence from the UK. *Fiscal Studies*, 45(4), 459–482. DOI: 10.1111/1475-5890.12381.
67. Sethiya, A., & Thenmozhi, M. (2023). Does product market competition moderate the impact of promoter ownership on firm value? *Managerial Finance*, 49(2), 378–397. DOI: 10.1108/MF-05-2020-0244.
68. Silvestrini, R., & Colciago, A. (2022). Monetary policy, productivity, and market concentration. *European Economic Review*, 142, Article 103999. DOI: 10.1016/j.eurocorev.2021.103999.
69. Singla, M., & Singh, S. (2019). Board monitoring, product market competition and firm performance. *International Journal of Organizational Analysis*, 27(4), 1036–1052. DOI: 10.1108/IJOA-07-2018-1482.
70. Syverson, C. (2019). Macroeconomics and market power: Context, implications, and open questions. *Journal of Economic Perspectives*, 33(3), 23–43. DOI: 10.1257/jep.33.3.23.
71. Tan, Y. (2016). The impacts of risk and competition on bank profitability in China. *Journal of International Financial Markets, Institutions and Money*, 40, 85–110. DOI: 10.1016/j.intfin.2015.09.003.
72. Terranova, R., & Turco, E. M. (2022). Concentration, stagnation and inequality: An agent-based approach. *Journal of Economic Behavior & Organization*, 193, 569–595. DOI: 10.1016/j.jebo.2021.11.002.



73. Touil, A., Babounia, A., & El Hamidi, N. (2024). How does adopting sustainable supply chain quality management improve corporate financial performance? A transaction cost perspective. *Investment Management and Financial Innovations*, 21(3), 170–186. DOI: 10.21511/imfi.21(3).2024.15.
74. Trish, E. E., & Herring, B. J. (2015). How do health insurer market concentration and bargaining power with hospitals affect health insurance premiums? *Journal of Health Economics*, 42, 104–114. DOI: 10.1016/j.jhealeco.2015.03.009.
75. Tsendsuren, C., Yadav, P. L., Han, S. H., & Kim, H. (2021). Influence of product market competition and managerial competency on corporate environmental responsibility: Evidence from the US. *Journal of Cleaner Production*, 304, Article 127065. DOI: 10.1016/j.jclepro.2021.127065.
76. Wen, W., & Zhu, F. (2019). Threat of platform-owner entry and complementor responses: Evidence from the mobile app market. *Strategic Management Journal*, 40(9), 1336–1367. DOI: 10.1002/smj.3031.
77. Yung, K., & Nguyen, T. (2020). Managerial ability, product market competition, and firm behavior. *International Review of Economics & Finance*, 70, 102–116. DOI: 10.1016/j.iref.2020.06.027.
78. Zhang, J., Chen, H., Zhang, P., & Jiang, M. (2022). Product market competition and the value of corporate cash: An agency theory explanation. *International Review of Financial Analysis*, 84, Article 102422. DOI: 10.1016/j.irfa.2022.102422.
79. Zheng, Z., Lin, Y., Yu, X., & Liu, X. (2021). Product market competition and the cost of equity capital. *Journal of Business Research*, 132, 1–9. DOI: 10.1016/j.jbusres.2021.04.013.
80. Zhu, F., & Liu, Q. (2018). Competing with complementors: An empirical look at Amazon.com. *Strategic Management Journal*, 39(10), 2618–2642. DOI: 10.1002/smj.2932.

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