Columbia Center on Sustainable Investment
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Harms from Concentrated Industries: A Primer

By Denise Hearn

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About and Acknowledgements

PURPOSE OF THIS DOCUMENT

This report is meant to act as a resource for civil society groups, policy makers, and interested members of the public who would like a basic primer on some issues related to market concentration and market power. The document references global and national research across different jurisdictions to demonstrate broad trends. In a short document, it is not feasible to comprehensively cover the range of sector, regional, and political nuances present in this vast body of law and policy. We have listed a number of civil society organizations at the end of the document for readers who wish to find further research and campaign efforts on these issues.

ABOUT THE AUTHOR

Denise Hearn is a Resident Senior Fellow at the Columbia Center on Sustainable Investment. She is an applied researcher, writer, and advisor who works with governments, financial institutions, companies, and nonprofits on antitrust, economic policy, and new economic thinking. She co-authored *The Myth of Capitalism: Monopolies and the Death of Competition* — named a Financial Times Best Book of 2018.

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Background / Introduction

Clashes between dominant firms exercising private power across the economy, and regulatory agencies tasked with preserving democracy have oscillated in ferocity throughout history. Today there is widespread recognition that in many markets, concentrated private economic and political power has yielded a range of anti-democratic, anti-innovation, and inequitable outcomes for consumers, workers, and smaller businesses.

A vast literature[1] now documents the macroeconomic and social harms from concentrated markets. As a 2019 International Monetary Fund (IMF) report states, "further increases in the market power of already-powerful firms could weaken investment, deter innovation, reduce labor income shares, and make it more difficult for monetary policy to stabilize output."[2]

Competition policy, or antitrust, is a subset of a broader anti-monopoly agenda, and an important foundation for the functioning of fair markets. How its laws are crafted, interpreted, and enforced has substantial economic and social effects at local and regional levels, as well as national and international levels. The way that competition policy is written, interpreted, and applied has wider societal impacts beyond competition, including effects on democracy, economic inequality, growth and innovation, racial and gender imbalances, privacy, geopolitical implications and more. Competition policy also has redistributive economic effects between stakeholders, often privileging the largest corporate actors and their shareholders at the expense of other stakeholders.[3]

As the largest global firms have grown in size and reach, many national jurisdictions have set up competition authorities. In the last four decades, more than 120 legal systems have created competition rules, establishing National Competition Authorities (NCA) across a significant portion of countries.[4] However, competition policy includes, but is not limited to, antitrust enforcement. It can also include a broader set of legislative and regulatory reforms which provide market guardrails that protect consumers, workers, independent businesses, and fair market dealing.[5] The recently introduced Digital Markets Act in the EU is an example of competition policy using additional regulatory layers to protect the rights of consumers, start ups, and to spur innovation and economic growth.

Today, competition policy and antitrust law are experiencing new political potency as various global jurisdictions have strengthened and enhanced their enforcement regimes.[6]

1 For example: Tim Wu, *The Curse of Bigness: Antitrust in the New Gilded Age*, Columbia Global Reports, November 2018; Zephyr Teachout, *Break 'Em Up: Recovering Our Freedom from Big Ag, Big Tech, and Big Money*, Macmillan, July 2020; Matt Stoller, *Goliath: The 100-Year War Between Monopoly Power and Democracy*, Simon & Schuster, October 2019; Jonathan Tepper and Denise Hearn, *The Myth of Capitalism: Monopolies and the Death of Competition*, Wiley, November 2018; Michelle Meagher, *Competition is Killing Us: How Big Business is Harming Our Society and Planet - and What To Do About It,* Penguin Business, December 10, 2020.

2 World Economic Outlook, April 2019, Growth Slowdown, Precarious Recovery, IMF, April 2019 https://www.imf.org/en/Publications/WEO/Issues/2019/03/28/world-economic-outlook-april-2019.

3 Ioannis Lianos and Andrew McLean, Competition Law, Big Tech and Financialisation: The Dark Side of the Moon, September 15, 2021, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3930565.

4 Christopher Townley, Mattia Guidi and Mariana Tavares, Law and Politics of Global Competition: Why and How Non-state Actors Seek Influence in the International Competition Network. Utilities Law review, 23(4), 136-140, 2022, https://kclpure.kcl.ac.uk/portal/en/publications/law-and-politics-of-global-competition-why-and-how-non-state-acto.

5 The Right to Repair movement in the US – whereby consumers fight for their right to repair purchased goods and services without incurring penalties from the manufacturer – has been gaining ground in many US state legislatures, and is another example of competition policy beyond the bounds of the federal antitrust laws. See: https://www.repair.org/stand-up.

6 Competition policy can span multiple agencies as well. For example, in the US multiple federal agencies aside from the DOJ and FTC have direct antitrust authority including the Department of Transportation, US Department of Agriculture, Federal Communications Commission, The Federal Energy Regulatory Commission, and The National Oceanic and Atmospheric Administration, among others – in many cases the enforcement of these statutes is underemployed or dormant. State Attorneys General also have antitrust authority.

New market realities like digital market platform gatekeepers, the financialization of firms, the rise of private equity, resurgent labor movements, trade wars and industrial policy, and sustainability challenges, among others, have forced reconsiderations of how to adapt competition policy to meet new 21st century market realities.

Competition policy's narrow focus on consumer welfare (typically defined as low prices)[7] over the last 40-50 years saw technological giants ascend to new heights with little to no scrutiny or challenges to mergers. A focus on lowering prices for consumers meant that new assetization strategies – such as monetizing a user's attention while offering "free" products – went ungoverned by competition regulators. Non-price effects from concentrated markets like: threats to democracy or privacy, and effects on worker's rights or the environment were mostly ignored. Mergers largely went unchallenged, leading to concentration across many sectors of the economy which is well documented in the US,[8] Canada,[9] and Europe[10] and increasingly so in other jurisdictions.

As so-called "superstar firms" have come to dominate national and global economies – in part due to a lack of strong countervailing regulatory structures and antitrust enforcement, and in part due to new network effects or economies of scale and scope in financial, digital, and other markets – many large companies are now akin to para-state institutions, which set the terms and norms of markets, acting as de facto private regulators.

Global collective action problems like inequality, climate change, and biodiversity loss, which threaten the ecological and social thresholds upon which open societies are built, have also challenged the status quo of competition policy interpretation and enforcement. This presents a moment of political opportunity for a new vision, which asserts a concerted challenge to the ways in which concentrated corporate power undermines healthy economic, political, and social functioning across a range of industries.

An anti-monopoly policy agenda ensures that markets operate on fair and competitive terms, that they reward innovation, create widely shared ownership and prosperity, and allow the best ideas, products, and services to flourish. Markets are public creations, governed by democratically determined rules. Anyone can be an anti-monopolist and participate in the active governance and shaping of markets, and there is now a wide global community of people who identify as such. At the end of this document we list some civil society organizations that are working to foreground anti-monopoly policy approaches and to build communities of practice, for those interested in learning more.

Below, some of the harms from market concentration are outlined, as well as industry-specific or thematic considerations in technology, agriculture, and trade.

7 Cristina Caffarra, "Consumer Welfare Is Dead": What Do We Do Instead?—A Perspective from Europe, ProMarket, April 27, 2023, https://www.promarket.org/2023/04/27/consumer-welfare-is-dead-what-do-we-do-instead-a-perspective-from-europe/.

8 Yueran Ma, New Data Shows the Rise of Corporate Concentration in the US in the Past 100 Years, ProMarket, April 21, 2022, https://www.promarket.org/2022/04/21/new-data-shows-the-rise-of-corporate-concentration-in-the-us-in-the-past-100-years/.

9 Ray Bawania and Yelena Larkin, Are Industries Becoming More Concentrated? The Canadian Perspective, March 20, 2019, https://ssrn.com/abstract=3357041.

10 Gábor Koltay, Szabolcs Lorincz, and Tommaso Valletti, Concentration and Competition: Evidence From Europe and Implications For Policy, Journal of Competition Law & Economics, Volume 19, Issue 3, September 2023, Pages 466–501, https://doi.org/10.1093/joclec/nhad012.

Harms from Concentrated Markets

Market concentration is difficult to measure, as market definition can be challenging in increasingly complex and globally interconnected supply chains and product and services markets. Additionally, understanding the effects of market concentration, and creating causal links between the rising market shares of dominant firms – and the associated stakeholder harms – can also present challenges. However, a number of troubling macroeconomic trends in recent years can, in part, be linked to market concentration.

Market dominance can come from offering more innovative products, the winner-take-most dynamics of some modern technology markets, network effects, economies of scale or scope, or the increased efficiencies gained from large, globally-interconnected supply chains. Vertical integration throughout supply chains or horizontal dominance through acquiring direct competitors are both methods of acquiring market power.

However, market power can also be gained by thwarting rivals using anti-competitive means like monopolizing markets, using buyer or seller power to underprice rivals (predatory pricing), using unfair contract terms, or a range of other illegal behavior. When illegal or unfair methods of competing largely define how markets operate, a number of harms to stakeholders emerge.

Higher Consumer Prices

One of the most direct ways to measure market power is markups – the ratio of price to the marginal costs of production. Markups have been rising across many countries and sectors. For example, markups for US firms have gone from roughly 18% above marginal production costs in 1980 to 67% today.[11] This trend applies across the world.[12] When firms are highly concentrated, they have market power which often translates into pricing power. This pricing power can be used to charge higher prices for goods and services, as customers cannot easily switch to a different provider.

Research from Jan De Loecker and Jan Eeckhout looked at the evolution of markups in different regions of the world, by analyzing the financial statements of over 70,000 individual firms across 134 countries and creating an estimated markup measure that could be used to compare across jurisdictions. Figure 1 shows that the global market power of firms (as measured by increases in markups) rose between 1980-2000, stayed relatively constant in the first decade of the 2000s, and then began rising sharply again.

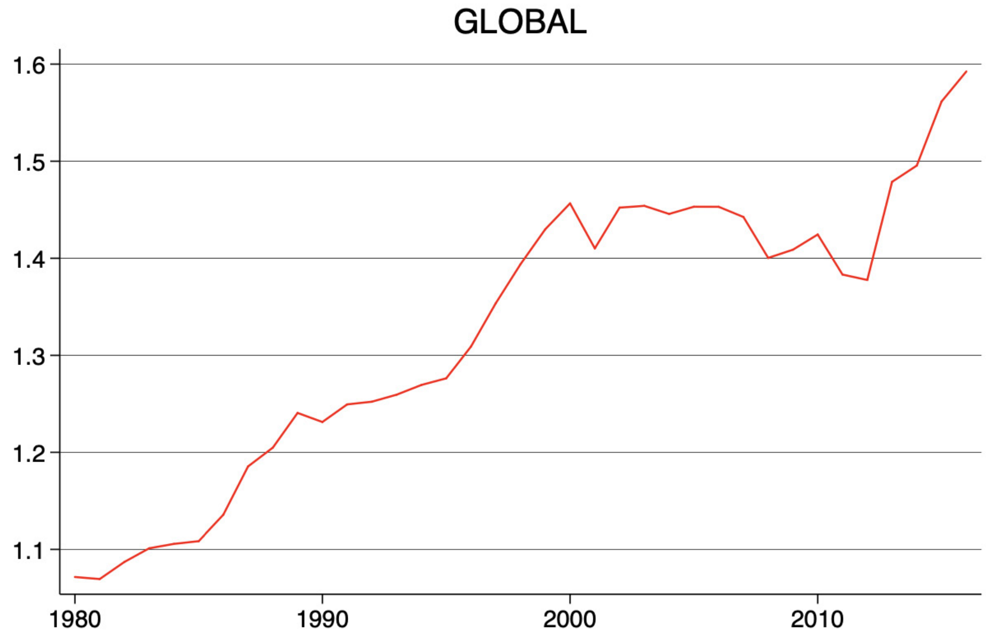


Figure 1: Global Market Power

Source: Global Market Power | Jan De Loecker and Jan Eeckhout

11 Jan De Loecker and Jan Eeckhout,"The Rise of Market Power and the Macroeconomic Implications" (August 2017). NBER Working Paper No. 23687 https://www.nber.org/papers/w23687.

12 Jan De Loecker and Jan Eeckhout,"Global Market Power," CEPR Discussion Paper No. DP13009, 18, Posted June 26, 2018, https://ssrn.com/abstract=3202301.

The table below, from the same researchers, compares the change in markups from 1980 to 2016 in individual countries and shows that Europe, North America, and Oceania have comparable (and the highest levels) of markups, whereas in Asia the increase in markups is less pronounced. South America, though demonstrating a less significant rise in markups, had a high level from the beginning of the dataset relative to other jurisdictions.

		Markup 2016	Markup change*
Global Average		**1.59**	**+0.52**
Europe		**1.64**	**+0.66**
1	Denmark	2.84	+1.95
2	Switzerland	2.72	+1.63
3	Italy	2.46	+1.46
4	Belgium	2.06	+1.03
5	Greece	1.80	+0.85
6	United Kingdom	1.68	+0.74
7	Norway	1.60	+0.74
8	Ireland	1.82	+0.66
9	France	1.50	+0.53
10	Sweden	1.31	+0.50
11	Netherlands	1.52	+0.47
12	Finland	1.36	+0.44
13	Austria	1.33	+0.41
14	Spain	1.34	+0.33
17	Germany	1.35	+0.29
16	Portugal	1.19	–0.06
North America		**1.76**	**+0.63**
1	United States	1.78	+0.63
2	Canada	1.53	+0.61
3	Mexico	1.55	+0.17
Africa		**1.38**	**+0.32**
1	South Africa	1.34	+0.07

		Markup 2016	Markup change*
Asia		**1.45**	**+0.43**
1	South Korea	1.48	+0.72
2	Hong Kong	1.65	+0.41
3	India	1.32	+0.34
4	Japan	1.33	+0.30
5	Indonesia	1.50	+0.22
6	Thailand	1.44	+0.21
7	Malaysia	1.33	+0.03
8	Pakistan	1.17	–0.01
9	Taiwan	1.24	–0.15
10	Turkey	1.16	–0.32
11	China	1.41	–0.45
12	Philippines	1.50	–0.77
Oceania		**1.55**	**+0.56**
1	Australia	1.57	+0.57
2	New Zealand	1.35	+0.37
South America		**1.59**	**+0.01**
1	Argentina	1.45	+0.64
2	Colombia	1.56	+0.41
3	Brazil	1.61	–0.01
4	Peru	1.64	–0.04
5	Venezuela	1.47	–0.46
6	Chile	1.37	–2.25

Table 1: Sample of Individual Countries (40 countries out of 134). Countries in each region are ranked by their change in markup. The Region and Global averages are for all countries in that geographical area, not just those reported in the table.
*Difference between markup in 2016 and 1980. If the first observation (1980) is missing, we extrapolate linearly.

Source: Global Market Power | Jan De Loecker and Jan Eeckhout

While these aggregate measures of markups are helpful in understanding broad trends, they do not capture how markups may be more pronounced in certain industries – within countries or regions – over time.

Higher consumer prices have been documented in healthcare, agriculture, retail, real estate, banking, and telecommunications, among others.[13] While high consumer prices are not necessarily reflected in technology and social media platforms such as Meta, Google, Apple, and Amazon, (which may explain the flat aggregate measures of markups in the 2000s), digital platforms often impose higher tolls on suppliers or third-party platform users (via advertising, fulfillment, cloud storage, etc.). For example, Amazon now takes 45% of third-party seller revenue when a customer purchases a product on its platform (up from 19% in 2014).[14]

13 See: Constantin Colonescu, Price Markups and Upstreamness in World Input-Output Data, MacEwan University, April 2021, https://www.researchgate.net/publication/351102811_Price_Markups_and_Upstreamness_in_World_Input-Output_Data; IBIS World, The 10 Industries with the Highest Profit Margin in the US, 2023, https://www.ibisworld.com/united-states/industry-trends/industries-highest-profit-margin/.

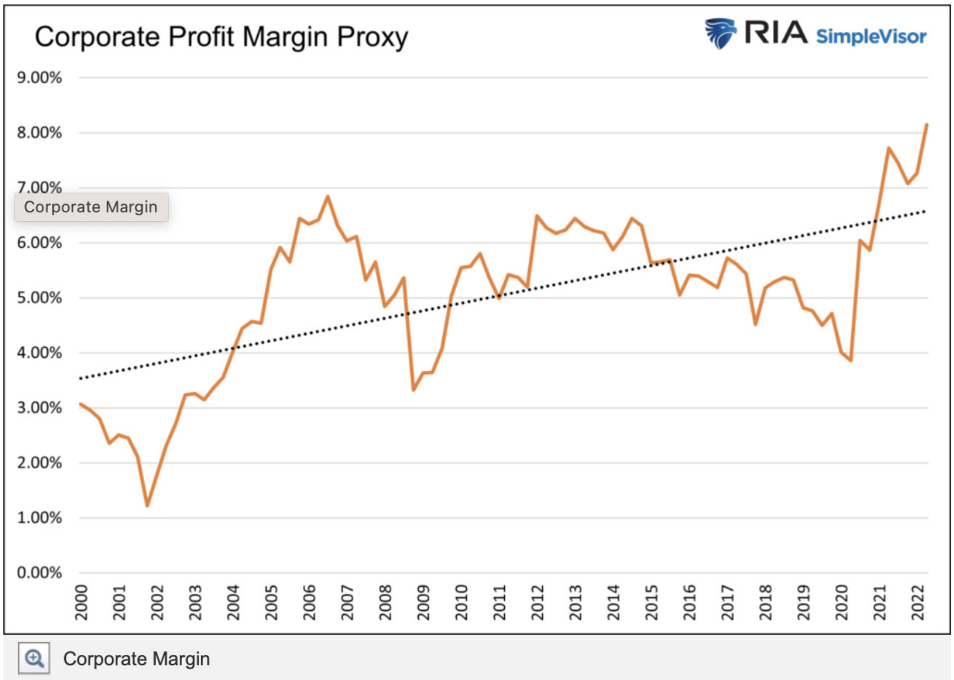
14 Stacy Mitchell, New Research: Amazon's Monopoly Tollbooth in 2023, Institute for Local Self Reliance (ILSR), September 21, 2023, https://ilsr.org/amazonmonopolytollbooth-2023/; Spencer Soper, Amazon Is Taking Half of Each Sale From Its Merchants, Bloomberg, February 13, 2023, https://www.washingtonpost.com/business/on-small-business/amazon-is-taking-half-of-each-sale-from-its-merchants/2023/02/13/05d7d80c-abb2-11ed-b0ba-9f4244c6e5da_story.html.

Higher Corporate Profit Margins

Corporate profit margins are typically measured in three ratios: gross profit margins, operating profit margins, and net profit margins. Each metric gives different information about a company's income and costs. Corporations can increase profit margins by lowering labor or production costs, by expanding their market share to sell more products, or by raising the price of the product or service (or some combination of these).

The economist Isabella Weber coined the term "seller's inflation"[15] to describe the phenomenon of large, dominant firms hiking prices during the 2020 Covid pandemic. While inflation is typically seen as the result of macroeconomic factors, she argued that it also comes from firms with market power which have the ability to raise prices – sometimes in tandem with competitor firms – in times of emergency. This contributed to record-high corporate profit margins, the highest in 70 years (since 1950) in the US, and high levels of inflation during the pandemic.[16]

Many other jurisdictions are also dealing with record-high inflation. Reports from the Federal Reserve, the OECD, and other academics[17] now attribute part of these effects to the pricing power of concentrated industries. The below chart shows that corporate profit margins in the US have been trending upwards since at least the year 2000.



Source: Corporate Profit Growth Will Slow, Says The U.S. Fed | investing.com

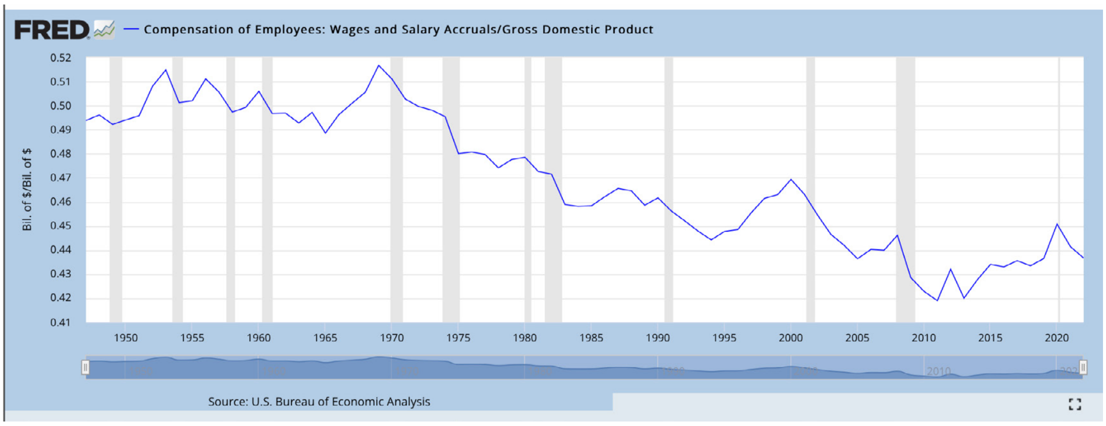
15 Isabella M Weber. and Evan Wasner, "Sellers' Inflation, Profits and Conflict: Why can Large Firms Hike Prices in an Emergency?" (2023). Economics Department Working Paper Series. 343. https://scholarworks.umass.edu/econ_workingpaper/343/.

16 Reade Pickert, US Corporate Profits Soar With Margins at Widest Since 1950, Bloomberg, August 25, 2022, https://www.bloomberg.com/news/articles/2022-08-25/us-corporate-profits-soar-taking-margins-to-widest-since-1950; and Ben Werschkul, Corporate profits are at a 70-year high. Will the Inflation Reduction Act change that?, Yahoo Finance, August 30, 2022, https://finance.yahoo.com/news/corporate-profits-are-at-a-70-year-high-will-the-inflation-reduction-act-change-that-173207569.html.

17 Weber and Wasner, *supra* note 15; Servaas Storm, Profit Inflation Is Real, Institute for New Economic Thinking, June 15, 2023, https://www.ineteconomics.org/perspectives/blog/profit-inflation-is-real.

Squeezing Labor: Lower Worker's Wages

Workers have been some of the biggest losers in the new monopolized economy. Wages have stagnated since the 1970s, as the concentrated buying power (called monopsony power) of employers created downward pressure on wages. In recent years, economists have puzzled over the decline in the labor share (how much of GDP goes to workers vs. capital owners), which has been falling since its peak in 1970 in the US. For decades, the labor share was two-thirds of GDP, globally. Then, in 1980, the labor share began to decline, from 65-66 percent of GDP to about 58-59 percent today (a decline of 7 percent). Overall, that is around $6 trillion less going to workers every year.[18]



Source: [Compensation of Employees: Wages and Salary Accruals/Gross Domestic Product | FRED, St. Louis Fed]

These trends are consistent among regions and international geographies. Researchers analyzed the US, Canada, and 12 European countries using a similar methodology and comparable data and found that "18% of workers in the 14 countries considered are in labor markets that are at least moderately concentrated…and 11% are found in highly concentrated labor markets."[19] They also found that the trends were similar in North America and Europe, despite different regulatory environments between countries and that workers in rural areas were more likely to be in highly concentrated labor markets.[20] Effects range from lower wages to less bargaining power and job mobility.

A study by the World Bank found that wage markdowns increase by 25 percent in concentrated product markets in Indonesia.[21] And in Australia, the share of GDP going to workers hit a record low in 2022.[22]

18 Europe's monopoly Problem. . . and the missing trillions, Balanced Economy Project, June 22, 2021, https://thecounterbalance.substack.com/p/europes-monopoly-problem. This is not because workers have become less productive. Productivity has steadily risen. Workers have continually been more productive but remain less compensated, as most gains in profits flowed to executives and shareholders. This, in turn, has contributed to higher inequality.

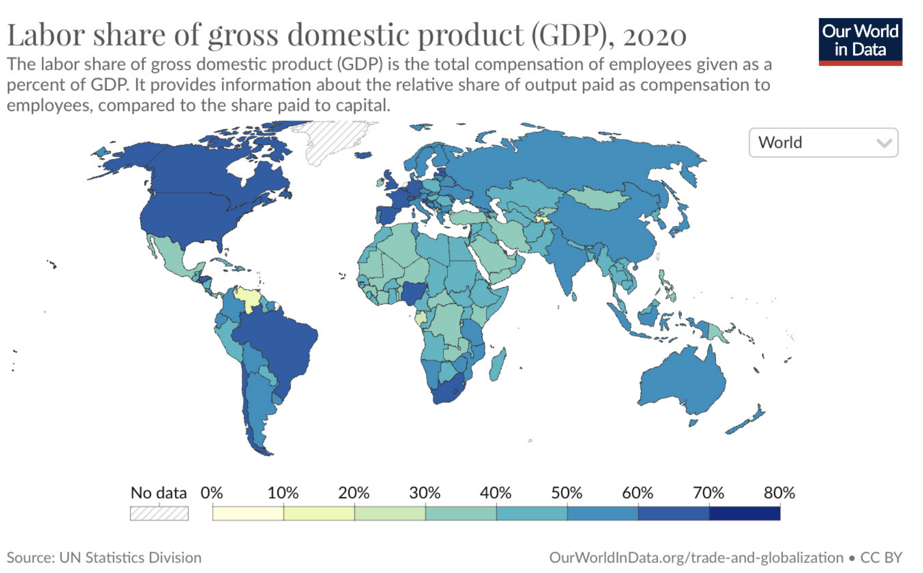
19 Satoshi Araki, Andrea Bassanini, Andrew Green, Luca Marcolin, and Cristina Volpin, *Labor Market Concentration and Competition Policy Across the Atlantic,* The University of Chicago Law Review [90:2], January 2023, https://lawreview.uchicago.edu/print-archive/labor-market-concentration-and-competition-policy-across-atlantic.

20 Ibid.

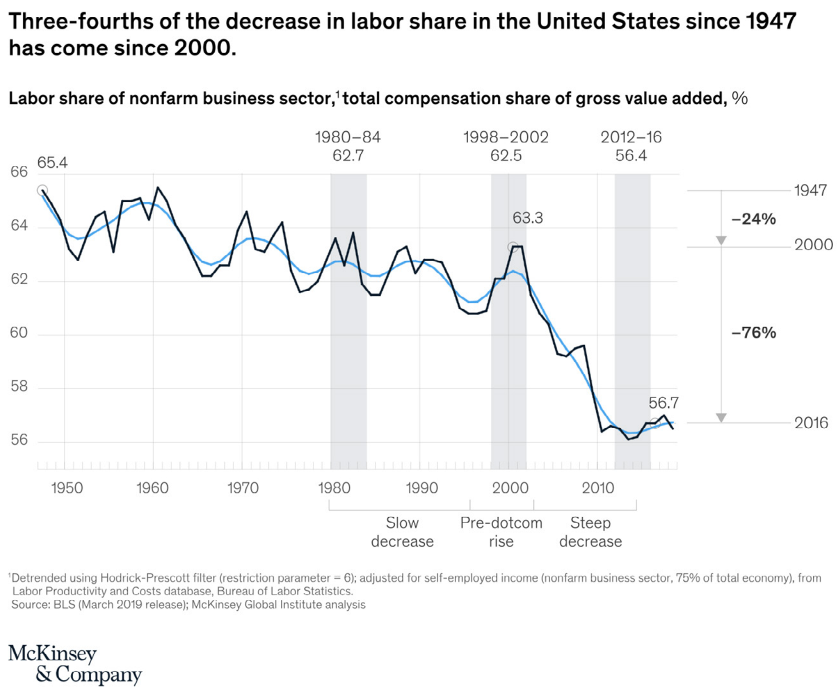
21 Massimiliano Calì and Giorgio Presidente, Product Market Monopolies and Labor Market Monopsonies, World Bank Group, Macroeconomics, Trade and Investment Global Practice March 2023, https://openknowledge.worldbank.org/server/api/core/bitstreams/7e717d23-54d0-47fa-a34d-98e592e3949a/content.

22 Greg Jericho and David Richardson, The share of GDP going to workers hits a record low, The Australia Institute, September 7, 2022, https://australiainstitute.org.au/post/the-share-of-gdp-going-to-workers-hits-a-record-low/.

Another way to identify how much of the economic pie is going to workers is to look at the labor share of corporate income. This has been declining since the 1980s with an estimated $535 billion less going to workers since 2000 in the US.[23] A 2019 McKinsey analysis found that the effects from superstar firms and consolidation, across many industries, was the 3rd most important effect for falling labor shares (behind economic supercycles and boom-bust dynamics, and rising depreciation due in part to the shift to intangible value, such as intellectual property).[24]



Source: [Labor share of gross domestic product (GDP) | Our World in Data]



Source: [A new look at the declining labor share of income in the United States | McKinsey & Company]

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23 Joh Bivens, The decline in labor's share of corporate income since 2000 means $535 billion less for workers, Economic Policy Institute, September 10, 2015, https://www.epi.org/publication/the-decline-in-labors-share-of-corporate-income-since-2000-means-535-billion-less-for-workers/.

24 James Manyika, Jan Mischke, Jacques Bughin, Jonathan Woetzel, Mekala Krishnan, and Samuel Cudre, A new look at the declining labor share of income in the United States, McKinsey Global Institute, May 22, 2019, https://www.mckinsey.com/featured-insights/employment-and-growth/a-new-look-at-the-declining-labor-share-of-income-in-the-united-states#section-header-3; David Autor, David Dorn, Lawrence F Katz, Christina Patterson, John Van Reenen, The Fall of the Labor Share and the Rise of Superstar Firms, The Quarterly Journal of Economics, Volume 135, Issue 2, May 2020, Pages 645–709, https://doi.org/10.1093/qje/qjaa004.

Less Worker and Counterparty Bargaining Power

Declines in unionization across OECD countries since the middle of the century has also negatively affected worker bargaining power. Additional trends such as a race to the bottom for labor due to globalization, technological change, and the rise of contract or gig labor facilitated largely by digital platforms have also contributed to this lack of worker power.

FIGURE A

Union membership and share of income going to the top 10 percent, 1917–2015

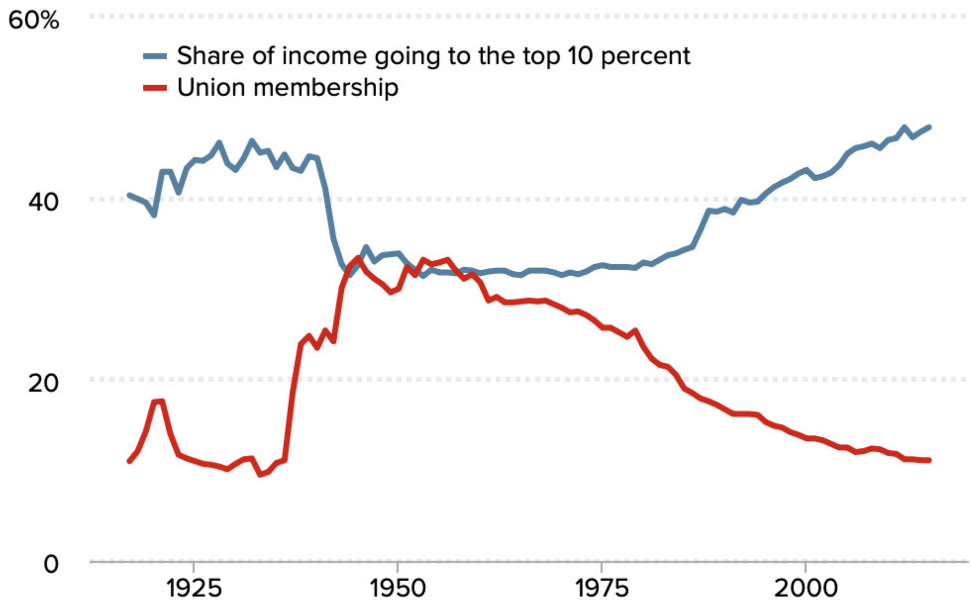


Chart Data

Sources: Data on union density follows the composite series found in Historical Statistics of the United States; updated to 2015 from unionstats.com. Income inequality (share of income to top 10 percent) data are from Thomas Piketty and Emmanuel Saez, “Income Inequality in the United States, 1913–1998,” *Quarterly Journal of Economics* vol. 118, no. 1 (2003) and updated data from the Top Income Database, updated June 2016.

Economic Policy Institute

Source: How today’s unions help working people: Giving workers the power to improve their jobs and unrig the economy | Economic Policy Institute

While these trends have often been analyzed in terms of their effects on wages, they have also produced a range of other worker restrictions that depress bargaining power for benefits, reasonable employment contract terms, and so forth. The proliferation of non-compete clauses, mandatory arbitration, and other such employment contract terms demonstrate labor's weakened bargaining position. However, concerted organizing efforts are beginning to reverse some of these trends.

Workers are not the only stakeholders who have seen their bargaining power erode over time. Consumers are also afflicted by product or service contracts that undermine their legal rights,[25] privacy, or which impose restrictive usage terms. Assets as diverse as farmer's tractors, music libraries, and medical devices are no longer owned by their purchaser, but subject to long legal contracts which limit their use. Consumers increasingly "rent" their purchases from a seller whose purpose is to extract economic rents from the asset. This can look like subscriptions, repair restrictions, intellectual property moats, and so forth. As a result, and in combination with more concentrated product and services markets, consumers also have less bargaining power.

Similarly, small to medium-sized businesses which act as counterparties in trade to dominant firms can find themselves on the losing end of anti-competitive and exclusionary business contract terms.[26] As larger firms act as digital platforms and gatekeepers between consumers and producers, increasingly onerous terms are inflicted upon sellers. For example, Amazon now earns more revenue from fees it collects from its third-party sellers than any other line of business, including Amazon Web Services (AWS) – its cloud storage business.

Less Innovation

Innovation in many industries has been stifled as incumbent players crush or acquire competitors, failing to commercialize solutions outside their core business model. Firms in concentrated industries spend less on productive investment, as a percentage of earnings.[27] One study found an inverse relationship between concentration and total number of innovations, suggesting that monopoly power disincentivizes innovation.[28] Lastly, a recent IMF report shows that competing firms are hurt when a market leader

25 Examples include: **Class action waiver clauses** which limit the legal avenues available to a business, worker, or consumer in the event of a breach of contract or otherwise illegal conduct by their counterparty; **Confession of judgment** — a written agreement in which a person automatically accepts the liability and damages listed in the contract (e.g. a borrower signing a cognovit note which subjects the defendant to court authority and waives their ability to defend themselves in court); **Waiver of statutory rights** — statutory rights are an individual's legal rights that are provided by state or federal statute. Some attempts to limit a stakeholder's statutory rights, such as minimum product quality and warranty standards, are illegal because these statutory rights cannot be waived by contract; **Unilateral modification clauses / change-of-terms provisions** — gives one company the ability to unilaterally, without warning or written agreement, change the terms of a contract.

26 Unfair or Coercive Business Contract Terms, Access to Markets, Site accessed October 30, 2023. https://accesstomarkets.org/the-latest/potentially-unfair-or-coercive-business-contract-terms/.

27 As corporations amassed cash following the Trump tax cuts of 2017, corporate managers reduced investment and, instead, spent the majority of company cash on stock buybacks and dividend payments to shareholders (including themselves). According to Senator Elizabeth Warren, between 2007 and 2016 large firms used 93% of their corporate earnings to payout shareholders instead of re-investing in R&D, employees, or in capital expenditures. R&D has also tended to allow for the corporate capture of innovation pathways, where technological progress for humanity becomes path dependent upon the commercialization strategies of incumbent firms. See: William Lazonick, Mustafa Erdem Sakinç, and Matt Hopkins, Why Stock Buybacks Are Dangerous for the Economy, Harvard Business Review, January 07, 2020, https://hbr.org/2020/01/why-stock-buybacks-are-dangerous-for-the-economy.

28 Innovation in Large and Small Firms: An Empirical Zoltan J. Acs and David B. Audretsch, The American Economic Review, Vol. 78, No. 4 (Sep. 1988), pp. 678-690 American Economic Association, http://www.jstor.org/stable/1811167. Another study corroborates this and states, "the vast majority of ex-post evaluations of horizontal M&As finds large negative effects on innovation inputs and outputs." Justus Haucap and Joel Stiebale, Non-price effects of mergers and acquisitions, DICE Discussion Paper, No. 402, ISBN 978-3-86304-401-5, Heinrich Heine University Düsseldorf, Düsseldorf Institute for Competition Economics (DICE), Düsseldorf, 2022. https://www.econstor.eu/bitstream/10419/273473/1/1852800623.pdf.

engages in more M&A, claiming "this evidence suggests that M&A can act as a drag on growth, especially when they involve dominant firms."[29]

Some have argued that highly concentrated sectors even impact the venture capital and funding ecosystem, creating 'kill zones' in which venture capitalists will not fund startups in sectors which compete with dominant players, knowing they have little chance of upsetting incumbents. However it's not only a concern of less innovation, some argue that the infrastructural power of big tech firms can influence the direction of innovation – firms will privilege highly monetizable innovation over socially useful innovation, and this can constrain other opportunities or market pathways.[30]

Less Business Dynamism and Fewer Start-ups

Declining business dynamism – the rate at which firms enter the market, grow, and leave – is now well documented in the US.[31] And numerous OECD countries are also experiencing "widespread and pervasive" declines.[32] This is significant because the process of so-called "creative destruction" is a part of what dynamically allocates resources in the economy and ensures that new innovations can reach the market. Higher business dynamism is associated with higher productivity, as new firms create the majority of new jobs in the economy. Market concentration reduces new business entry, which is more pronounced in certain industries like telecom and IT.[33]

According to one IMF study, "Market power has increased significantly among publicly listed firms in advanced economies since the early 1980s…This increase is concentrated among a small group of firms whose market power is increasingly entrenched, and it has been accompanied by a broad-based decline in business dynamism — including a falling share of economic activity accounted for by young firms and lower disparities between different firms' growth rates."[34]

Another study found pervasive declines in business dynamism across many OECD countries between 2000-2015.[35] Researchers found that job entry rates and job reallocation rates declined on average by three and five percentage points, respectively across 18 countries and 22 industries. This means that older, most established firms are exerting more control over the job market. A Brookings report found that the employment share of young firms has decreased by more than one-third since 1987 in the US.[36] This translates to fewer startups in the economy.

29 Ufuk Akcigit, Wenjie Chen, Federico J. Diez, et al., "Rising Corporate Market Power: Emerging Policy Issues," International Monetary Fund, March 15, 2021, https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2021/03/10/Rising-Corporate-Market-Power-Emerging-Policy-Issues-48619.

30 Kevin A. Bryan and Erik Hovenkamp, Startup Acquisitions, Error Costs, and Antitrust Policy, University of Chicago Law Review, May 2020, https://chicagounbound.uchicago.edu/uclrev/vol87/iss2/3/.

31 Ufuk Akcigit and Sina T. Ates, What Happened to U.S. Business Dynamism?, NBER, May 2019, https://www.nber.org/papers/w25756.

32 Flavio Calvinoi, Chiara Criscuoloi and Rudy Verlhaci, Declining business dynamism: Cross-country evidence, drivers and the role of policy, OECD, November 10, 2020, https://web-archive.oecd.org/2021-01-21/577526-declining-business-dynamism.pdf.

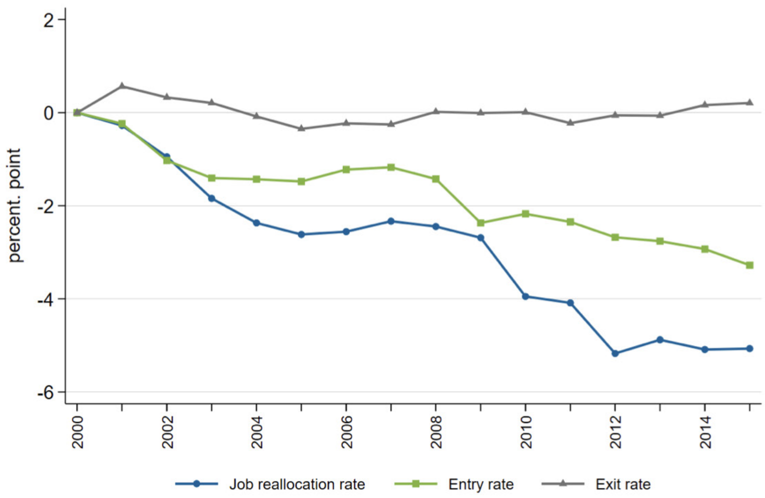
33 Michael Gallagher Feeney, Market Concentration and Business Dynamism: Do Concentrated Markets Deter New Entrants?, Georgetown University, 2023, http://hdl.handle.net/10822/1082717.

34 Ufuk Akcigit, Wenjie Chen, Federico J Diez, Romain A Duval, Philipp Engler, Jiayue Fan, Chiara Maggi, Marina Mendes Tavares, Daniel A Schwarz, Ippei Shibata, Carolina Villegas-Sánchez, Rising Corporate Market Power: Emerging Policy Issues, IMF, March 15, 2021, https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2021/03/10/Rising-Corporate-Market-Power-Emerging-Policy-Issues-48619.

35 Flavio Calvino, Chiara Criscuolo, and Rudy Verlhac, Declining business dynamism: Structural and policy determinants, OECD Science, Technology and Industry Policy Papers, 2000, https://doi.org/10.1787/77b92072-en.

36 Jay Shambaugh, Ryan Nunn, Audrey Breitwieser, and Patrick Liu, The state of competition and dynamism: Facts about concentration, start-ups, and related policies, Brookings, June 13, 2018, https://www.brookings.edu/articles/the-state-of-competition-and-dynamism-facts-about-concentration-start-ups-and-related-policies/.

Figure 2. Average within country-sector trends in job reallocation, entry and exit rates



Note: This figure reports average within-country-sector trends of job reallocation, entry and exit rates, based on the year coefficients of regressions within country-sector, for the period 2000-2015, including 18 countries: AUT, BEL, BRA, CAN, CRI, DNK, ESP, FIN, FRA, HUN, ITA, JPN, NLD, NOR, NZL, PRT, SWE and TUR. Each point represents average cumulative change in percentage points since 2000.
Source: OECD DynEmp3 database, June 2020.

Source: [Declining business dynamism: Structural and Policy Determinants | OECD]

On the other side of the business dynamism equation – exits – concentration has also influenced startups exit pathways. Researchers Florian Ederer and Bruno Pellegrino have posited that venture capital-driven acquisitions have led to fewer initial public offerings (IPOs) in recent years, and contributed to market concentration. Many large firms now have their own 'corporate venture capital' divisions which gobble up smaller companies at a fast pace, leaving less room for exit through IPOs. "Dominant companies that are disproportionately active in the corporate control market for startups have become more insulated from the pressures of product market competition over the same period. These facts are consistent with the hypothesis that startup acquisitions have contributed to rising oligopoly power."[37]

Lower Growth and Productivity

Economists have puzzled over slow or stagnant global growth in recent years, despite rapid technological advancements and huge injections of money from central banks. But a major contributor to stagnant and unproductive markets is industry concentration. According to one study, global GDP is 9-10% lower (about $8 trillion less) than it would be if we had the competitiveness of 1980.[38]

37 Florian Ederer and Bruno Pellegrino, The Great Startup Sellout and the Rise of Oligopoly, AEA Papers & Proceedings, Vol. 113, May 2023, https://ssrn.com/abstract=4322834.

38 Jan Eeckhout, The Profit Paradox, as interviewed by Nick Shaxson here: https://thecounterbalance.substack.com/p/europes-monopoly-problem.

Greater Inequality

Through the mechanisms identified above, wealth transfers between wealthy asset owners or the managerial class and the working class have become even more severe. One study found that for each dollar of monopoly profits, a total of USD 0.37 is transferred from the 90% poorest to the 10% richest.[39] Economist Thomas Philippon calculates that "a return to the level of competition prevailing in the United States in the late 1990s would add about $1.44 trillion to labor income in the United States."[40] And research from RAND estimated that if the same income distribution would have held steady from the three decades following World War II (1945-1974), the bottom 90% of American income earners would have $47 trillion more.[41]

A recent paper also links monopoly power to racial inequity: "Without drastic policy action it will take 228 years for average Black wealth and 84 years for average Latinx wealth to match the wealth that white households hold today…These disparities are driven by two reinforcing phenomena connected to the issue of corporate concentration: 1) the systematic withholding of wealth from people of color and 2) the gross concentration of wealth held by the corporate elite."[42]

Another dynamic is the hollowing out of rural areas in developed nations, as capital flows from rural to urban centers or to global centers where companies can evade local, state, or federal taxes. Inequality also can act as a drag on aggregate demand and economic growth.[43]

Firms Act as De Facto Private Regulators

A dominant corporation acting as a gatekeeper to markets, thus making itself a private regulator, is increasingly common.[44]

Digital platforms, as an example, can set the terms of content moderation, free speech, information flows, privacy considerations, content shown to children, and so forth. Firms increasingly play a regulatory role, but an undemocratic one – one in which users or customers have little recourse to change the terms of their service. And in some cases, companies can implement business models that aim for extra profits rather than offering quality products (like respecting a user's right to privacy or other rights-respecting services).

39 Joshua Gans, Andrew Leigh, Martin Schmalz, Adam Triggs, 'Inequality and market concentration, when shareholding is more skewed than consumption' [2019] Oxford Rev Econ 550; S Ennis 'Inequality: A hidden cost of market power' (2017) OECD https://issuu.com/oecd-daf/docs/oecd-paper-inequality-hidden-cost-m.

40 Thomas Philippon, "Causes, Consequences, and Policy Responses to Market Concentration," at 26 (Aspen Economic Strategy Group, Nov. 21 2019), https://www.economicstrategygroup.org/wp-content/uploads/2019/12/Maintaining-the-Strength-of-American-Capialism-Causes-Consequences-and-Policy-Responses-to-Market-Concentration.pdf.

41 Note: calculations through 2018. Carter C. Price and Kathryn A. Edwards, Trends in Income From 1975 to 2018, RAND, 2020, https://doi.org/10.7249/WRA516-1.

42 Jeremie Greer and Solana Rice, Anti-Monopoly Activism: Reclaiming Power through Racial Justice, Liberation in a Generation, March 2021, https://www.liberationinageneration.org/wp-content/uploads/2021/03/Anti-Monopoly-Activism_032021.pdf.

43 Josh Bivens and Asha Banerjee, Inequality's drag on aggregate demand: The macroeconomic and fiscal effects of rising income shares of the rich, May 24, 2022, https://www.epi.org/publication/inequalitys-drag-on-aggregate-demand/.

44 Denise Hearn, Nidhi Hegde, and Matt Stoller, The Other Red Tape: Market Concentration and the Rise of Private Gatekeepers, Economic Liberties, June 2021, https://accesstomarkets.org/learn/the-other-red-tape-market-concentration-and-the-rise-of-private-gatekeepers/.

Over the past two decades, regulatory agencies have increasingly tasked larger firms with performing the duties of a public regulator,[45] and firms often through their industry associations, standards-setting bodies, and other means create their own non-binding industry rules. Sometimes, these have the effect of forestalling more stringent regulation or enforcement.

Erosion of Democracy / Democratic Process

As certain superstar firms have taken advantage of global network effects, their reach and influence have gone well beyond the boundaries of any one national jurisdiction. Many global multinational firms now act as para-state institutions which craft markets and policy-making to their own ends. Concentrations of economic power lead to concentrations of political power.

In the US, many studies have shown that large lobbying spending allows companies to regularly and systematically curtail regulatory attempts to rein them in. A recent study found a positive correlation between market power and lobbying spend – the more market power a corporation acquires, the more it lobbies. The results suggested a "significant empirical link between increased corporate consolidation and increased corporate political power."[46] Other studies show significant "Return On Investment For Lobbying" (ROIFL). One older study demonstrated a 22,000 percent return on tax policy lobbying in the US. For every dollar spent on lobbying, the companies received $220 in tax benefits.[47] Beyond lobbying, campaign contributions significantly affect which candidates are elected and their subsequent policy positions.

The Cambridge Analytica scandal alerted the world to the very direct ways in which social media platforms were used to undermine and shape democratic elections across numerous nations. But many other mechanisms, including the investor-state dispute settlement (ISDS) system,[48] non-public trade negotiations which can supersede national laws and regulations, revolving door dynamics, and the funding of think tanks and academic institutions,[49] among others, contribute to the private capture of public bodies. This often means that private firms dictate the public agenda and control the very structure of democracy.

45 Rory Van Loo, The New Gatekeepers: Private Firms as Public Enforcers, Boston University School of Law, April 2020, https://scholarship.law.bu.edu/faculty_scholarship/800/.

46 Reed Showalter, *Democracy for Sale: Examining the Effects of Concentration on Lobbying in the United States* (Am. Econ. Liberties Proj., Working Paper Series on Corporate Power No. 10, 2021), https://www.economicliberties.us/wp-content/uploads/2021/08/Working-Paper-Series-on-Corporate-Power_10_Final.pdf.

47 Raquel Meyer Alexander, Stephen W. Mazza, and Susan Scholz, Measuring Rates of Return for Lobbying Expenditures: An Empirical Case Study of Tax Breaks for Multinational Corporations, Journal of Law and Politics, Vol. 25, No. 401, April 8, 2009, https://ssrn.com/abstract=1375082.

48 Daniel Rangel, Lori Wallach, Ladan Mehranvar, Alvaro Santos, and Mario Osorio, Turning the Tide: How to Harness the Americas Partnership for Economic Prosperity to Deliver an ISDS-Free Americas, Rethink Trade, October 2023, https://rethinktrade.org/isds-freeamericas-papermain/.

49 To tackle corruption, start with monopoly power: It is not only public officials who abuse power for private gain, The Balanced Economy Project, May 17, 2023, https://thecounterbalance.substack.com/p/to-tackle-corruption-start-with-monopoly.

Reinforces Western Financial Power

Global economic power structures are highly concentrated and rigid.[50] Evidence suggests that "a North Atlantic ruling class remains at the centre of the process of transnational capitalist class formation."[51] One study looked at networks of control by transnational corporations and found international "super-entities" in which a few companies had major control over the entire network. Their research concluded that there is a cluster of super influential actors in global networks that exert tremendous influence on capital through direct and indirect ownership: "less than 0.0009% of the actors in the entire global ownership network have the potential to influence slightly more than one sixth of the operating revenue of firms worldwide."[52]

These actors in the "super-entity" can change over time, but the power structure remains intact. BlackRock and Vanguard top their 2012 Influence Index list and 3/4 of companies in the core were financial intermediaries.[53] Another more recent paper, "Centralization of capital and financial crisis: A global network analysis of corporate control" finds that less than 2% of the economic actors control up to 80% of economic value, and that there had been an increase of more than 20% in the global centralization of capital since the Great Financial Crisis of 2008.[54]

50 "The people who ran, and run, transnational corporations can be thought of as a transnational elite in that they share increasingly strong social, political and cultural networks. But now we can also speak of a true transnational class: a group that, sometimes directly, sometimes indirectly, sometimes consciously and sometimes unconsciously, controls the exercise of economic power across and within national boundaries. Their power is exercised in part through individual agency but even more so through the collective structures of ownership of very large corporations." Georgina Murray, The financialisation of global ownership, 2010, https://www.academia.edu/3107433/The_financialisation_of_global_ownership.

51 William K. Carroll and Jean Philippe Sapinski, The Global Corporate Elite and the Transnational Policy-Planning Network, 1996–2006 A Structural Analysis, University of Victoria, 2010, https://www.researchgate.net/profile/William-Carroll-15/publication/240711538_The_Global_Corporate_Elite_and_the_Transnational_Policy-Planning_Network_1996-2006_A_Structural_Analysis/links/549077c40cf214269f2677e1/The-Global-Corporate-Elite-and-the-Transnational-Policy-Planning-Network-1996-2006-A-Structural-Analysis.pdf.

52 James B. Glattfelder and Stefano Battiston, The Architecture of Power: Patterns of Disruption and Stability in the Global Ownership Network, Department of Banking and Finance, University of Zurich, Switzerland, January 15, 2019, https://papers.ssrn.com/sol3/Papers.cfm?abstract_id=3314648; "To summarize, all this diverse behavior highlights the complex interplay between the structure and function of the network components. Furthermore, it also emphasizes the important role of the structures themselves over their actual node composition. For instance, while the micro-picture can vary substantially, the emergent macro-behavior can remain stable. In conclusion, once a power structure emerges, it is persistent in time and represents a meta-level of organization, detached from the actual identities of the individual nodes present at a certain time. Such architectures of power show robust and resilient behavior in the face of global crisis."

53 Ibid.

54 Emiliano Brancaccio, Raffaele Giammetti, Milena Lopreite, Michelangelo Puliga, Centralization of capital and financial crisis: A global network analysis of corporate control, Structural Change and Economic Dynamics 45, 94-104, March 2018, https://www.researchgate.net/publication/323590529_Centralization_of_capital_and_financial_crisis_A_global_network_analysis_of_corporate_control.

A Few Sector and Thematic Implications

Globalization and Trade

Weakened antitrust enforcement within national borders became even more challenging with globalization and the rise of digital economies. As multinational enterprises grew in scale and dominance, they ascended beyond the size of any one nation's ability to properly regulate them. Often, the sheer size, profitability, and diversity of the largest multinational companies gave them leverage over single-market domestic firms which led to 'offshoring' and the relocation of corporate headquarters to favorable tax jurisdictions. This makes it difficult for countries, especially small countries, to regulate, tackle tax evasion, or to counter other abuses. International agreement is challenging, and therefore leads to a patchwork of fragmented regulatory and legal regimes.

Trade liberalization had similar effects on concentration, as free trade agreements between the US and China, in particular, harmed smaller domestic manufacturers while benefiting large multinational corporations.[55] China joined the World Trade Organization (WTO) in 2001, and 8 short years later, became the world's largest exporter. Smaller businesses did not have the capital, infrastructure, or trading relationships to compete with larger ones, and this naturally caused the disappearance of smaller firms within industries. While consumers largely benefited from globalization, US workers and entrepreneurs often found themselves on the losing end of trade liberalization policies – as did workers and entrepreneurs abroad. Competition policy's narrow focus on consumer welfare and efficiency gains ignored these other 'externalities.'

Today, trade and "digital trade" negotiations are used as venues to evade regulation through "international preemption," undermining the ability for national regulatory agencies to prosecute illegal behavior through binding international agreements.[56] And big tech companies use digital trade negotiations to facilitate favorable data transfers between jurisdictions in which they operate and thus minimize the role of privacy and other public policy restrictions.

Various trade agreement venues can also be used as an attempt to prevent the rise of regulation (like the Digital Markets Act or the Digital Services Act) on grounds of discrimination.[57] For example, trade commitments narrowed and weakened EU rules to make AI source codes publicly available: "The capacity for public authorities and external

55 Thomas Griffin, Where Have All the IPOs Gone? Trade Liberalization and the Changing Nature of U.S. Public Corporations, September 11, 2023, https://ssrn.com/abstract=3287328.

56 Current venues for digital trade negotiations include:
- U.S.-led 14-nation IPEF
- U.S.-led 13-nation Latin American agreement called the Americas Partnership for Economic Prosperity (APEP) (similar to IPEF)
- U.S. bilateral negotiations with Taiwan and Kenya
- Various bilateral negotiations that involve the few other countries, such as Singapore, Australia, and Japan, that have adopted the industry-pushed rules in their trade pacts
- Joint Statement Initiative on E-Commerce (JSI E-Comm), which is a WTO-proximate negotiation

(Information garnered from Lori Wallach, Director of Rethink Trade).

57 Robert Kuttner, The EU's Tough New Rules for Tech, The American Prospect, October 3, 2023, https://prospect.org/world/2023-10-03-eus-tough-new-rules-for-tech/.

auditors to access the source code of Artificial Intelligence in an upcoming EU rulebook was restricted based on a digital trade agreement, according to internal documents from the European Commission."[58]

This is not a new strategy, as many Big Pharma companies used 1990s trade negotiations at the WTO to procure favorable patent-extension clauses in trade agreements. With many industries like pharmaceuticals, agriculture, digital markets, and others highly concentrated, it is imperative to pay attention to how these concentrated actors collectively lobby for favorable treatment through trade negotiations with the goal of institutionalizing/formalizing a global deregulatory agenda.

However, there are hundreds of Bilateral Trade Agreements (BTAs) and Multilateral Trade Agreements (MTAs) under the WTO, many of which have competition considerations or provisions that vary in strength.[59] This provides an avenue to potentially systematically strengthen these trade provisions when opportune trade negotiations are underway.

Agriculture

Unchallenged mergers in recent decades have left a handful of transnational corporations at the center of the global food value chain. Today, many levels of the complex global food system are concentrated including seeds, agrochemicals, grains, commodity traders, meat production, industrial farming equipment, production facilities like meat packing, synthetic fertilizers, livestock genetics, animal pharmaceuticals, and retail distribution.[60]

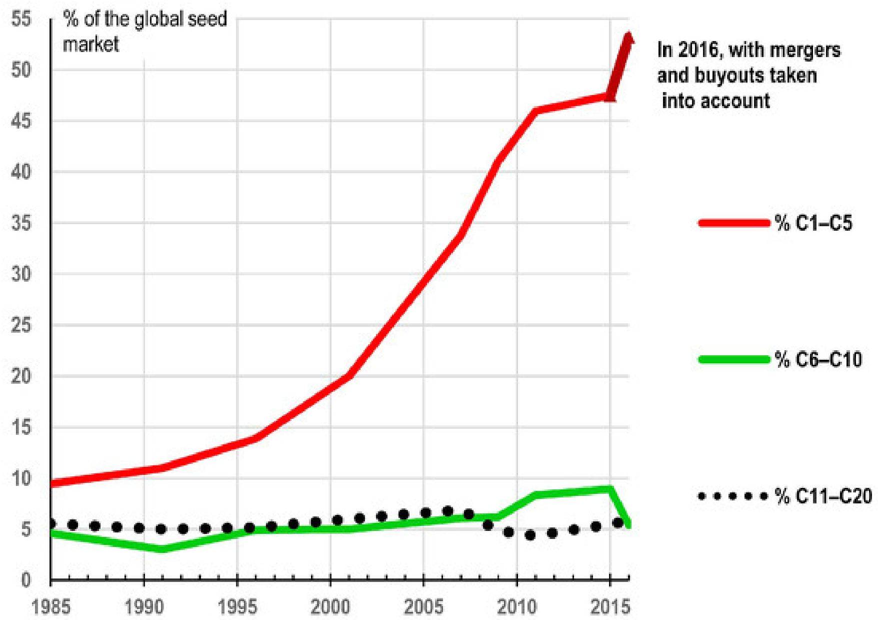
Industrialized food production relies on a few global producers of staple grains, making the system highly susceptible to exogenous shocks, which climate change will only increase.

58 Luca Bertuzzi, How trade commitments narrowed EU rules to access AI's source codes, Euractiv.com, May 3, 2023, https://www.euractiv.com/section/artificial-intelligence/news/how-trade-commitments-narrowed-eu-rules-to-access-ais-source-codes/.

59 Robert D. Anderson, William E. Kovacic, Anna Caroline Müller and Nadezhda Sporysheva, Competition Policy, Trade and the Global Economy: Existing WTO Elements, Commitments in Regional Trade Agreements, Current Challenges and Issues for Reflection, World Trade Organization, Economic Research and Statistics Division, October 31, 2018, https://www.wto.org/english/res_e/reser_e/ersd201812_e.pdf; International Regulatory Co-operation: Case Studies, Vol. 1: Chemicals, Consumer Products, Tax and Competition, OECD, Competition law enforcement, April 30, 2013, https://read.oecd-ilibrary.org/governance/international-regulatory-co-operation-case-studies-vol-1/competition-law-enforcement_9789264200487-6-en#page6.

60 Hope Shand, Kathy Jo Wetter, Kavya Chowdhry, and the ETC Group collective, Food Barons 2022: Crisis Profiteering, Digitalization and Shifting Power, September, 2022, https://www.etcgroup.org/files/files/food-barons-2022-full_sectors-final_16_sept.pdf.

Similarly, agrichemical and seed inputs are controlled by a few multinationals: Bayer-Monsanto, ChemChina-Syngenta, and Corveta (a Dow-DuPont spin out), and they are well known for tactics to reduce farmer power and economic independence such as prohibiting seed saving from year to year (sometimes suing farmers over this), creating genetically modified seeds which are only compatible with their pesticides, and other such tactics. The below chart shows the growth in market share of the top five global seed companies from 1985 to 2016.[61]



Source: [Corporate Concentration and Technological Change in the Global Seed Industry](https://www.mdpi.com/2071-1050/9/9/1632) | Sustainability

Similarly, seven major traders account for a large proportion of global agricultural commodity trading.[62]

Given the complexity of food systems, it is difficult to do justice to the many sets of interrelated challenges at regional, national, and global levels. However, the food system has experienced three major crises in the last 50 years – each with different triggers, but – all exposing the dangers of highly concentrated food systems.[63] In the early 1970s,

61 Sylvie Bonny, Corporate Concentration and Technological Change in the Global Seed Industry, *Sustainability*, September 14, 2017, https://www.mdpi.com/2071-1050/9/9/1632.

62 Simon Roberts and Ntombifuthi Tshabalala, HIGH FOOD PRICES IN AFRICA: Causes, Consequences and Agenda for Action, The African Climate Foundation, November 2022, https://africanclimatefoundation.org/wp-content/uploads/2022/11/800690-01-ACF-Position-Papers-COP27-Food-Prices-05.pdf; Additionally, the platforms for trading agricultural products are owned by multinational corporations based in the US and based on US dollars. This is being criticized as leading to higher prices and facilitating cartelization, and there is increasing interest for more sovereign, local solutions. For example, there was a recent case in Brazil involving a joint venture and data exchange among the largest agricultural firms SustainIt, Cargill, Louis Dreyfus and ADM who aimed to create a platform to measure sustainability in the food and agricultural supply chain. The case was also analyzed by the authorities in Chile and Ukraine. See: "Cade approves joint venture to develop sustainability measurement software," Administrative Council for Economic Defense, Government of Brazil, June 21, 2023, https://www.gov.br/cade/pt-br/assuntos/noticias/cade-aprova-joint-venture-para-desenvolvimento-de-software-de-medicao-de-sustentabilidade.

63 Jennifer Clapp, Concentration and crises: exploring the deep roots of vulnerability in the global industrial food system, The Journal of Peasant Studies, 50:1, October 9, 2022, https://www.tandfonline.com/doi/full/10.1080/03066150.2022.2129013; See also: Elsadig Elsheikh and Hossein Ayazi. "The Era of Corporate Consolidation and The End of Competition: Bayer-Monsanto, Dow-DuPont, and ChemChina- Syngenta." Haas Institute for a Fair and Inclusive Society at the University of California, Berkeley, CA. October 2018. https://escholarship.org/uc/item/100895ng; Jennifer Clapp; Mega-Mergers on the Menu: Corporate Concentration and the Politics of Sustainability in the Global Food System. *Global Environmental Politics* 2018; 18 (2): 12–33. doi: https://direct.mit.edu/glep/article-abstract/18/2/12/14909/Mega-Mergers-on-the-Menu-Corporate-Concentration.

scarcity in global grain supply coupled with global economic shocks[64] from oil prices and hyperinflation led to widespread famines affecting Sub-Saharan Africa and parts of Asia.[65] The 2008 Global Financial Crisis, the Covid-19 pandemic, and the 2022 Russian invasion of Ukraine also created shocks throughout food supply systems, which allowed concentrated firms to take advantage of their market position.

Agri-food cartels act as concentrated middleman companies that can extract price concessions from both producers and consumers. For example, global fertilizer companies reaped unusually high profits in 2022 and 2023 – the world's top nine producers tripled their profits in 2022 from two years previously. Fertilizer prices remain high today – particularly for many African nations – despite global prices coming down.[66] Higher input costs can constrain supply, and can harm smallholder farmers or producers. Farmers in Malawi and Zambia have experienced a margin squeeze as their costs for fertilizer rose dramatically. Similarly, another study demonstrated a margin squeeze on smallholder poultry farmers in Malawi from concentrated feed and day-old-chicks suppliers.[67] Consumers also pay the price. One study linked high food prices across Africa to increasing concentration in food supply systems.[68]

There have been successful cases brought against agricultural cartels by competition agencies in recent years, but generally, the fines imposed are so small that they are seen as a cost of doing business by large players. For example, in April 2021, the Economic Court of Cairo ruled against five poultry brokers for colluding to fix the price of chicken which harmed consumers and producers. The Competition Authority brought the case in March 2020, and the companies were fined 30 million Egyptian pounds (approx. 1.6 million Euros). Typically, maximum competition infraction fines are set legislatively or through rulemakings, so in many jurisdictions, the law or existing guidelines will need to be amended to allow for harsher monetary penalties. In some jurisdictions, or in certain cases, cartels can also be criminally prosecuted.

Technology and Digital Markets

'Technology' as a sector category is a misnomer, as digital products and financial technology now subsume the operations of most sectors to some degree. However, digital markets and platforms have created novel new challenges for competition policy. Waves of unchallenged mergers and acquisitions since the early 2000s allowed large digital gatekeepers to amass substantial market power, which they often leverage into other sectors or into conglomerate power (e.g. Amazon bookselling, transportation and logistics, health, fitness, lending, etc.).

64 Bryan L. McDonald, 'The World Food Crisis and the End of the Postwar Food System', *Food Power: The Rise and Fall of the Postwar American Food System* (New York, 2017; online edn, Oxford Academic, 17 Nov. 2016), https://doi.org/10.1093/acprof:oso/9780190600686.003.0007.

65 Christian Gerlach, Famine responses in the world food crisis 1972–5 and the World Food Conference of 1974, European Review of History: Revue européenne d'histoire, 22:6, 929-939, 2015, https://www.tandfonline.com/doi/abs/10.1080/13507486.2015.1048191?journalCode=cerh20.

66 Simon Roberts and Ntombifuthi Tshabalala, Food crisis in Africa: the high cost of imported fertilisers is adding to the problem, The Conversation, July 25, 2023, https://theconversation.com/food-crisis-in-africa-the-high-cost-of-imported-fertilisers-is-adding-to-the-problem-209664.

67 Timothy Gondwe, Grace Nsomba and Simon Roberts, Competition and the challenges of inclusive economic development: An apparent margin squeeze in poultry farming in Malawi, CCRED African Market Observatory Working Paper, December 10, 2022, https://static1.squarespace.com/static/52246331e4b0a46e5f1b8ce5/t/63d229bd7ed345046d2e54ce/1674717634165/Margin+squeeze+in+poultry+farming+in+Malawi+WP10.pdf.

68 High Food Prices in Africa: causes, consequences and agenda for action, The African Climate Foundation, https://africanclimatefoundation.org/wp-content/uploads/2022/11/800690-01-ACF-Position-Papers-COP27-Food-Prices-05.pdf.

Digital platforms can also utilize vast data troves to substantially grow their market power using a variety of anti-competitive tactics, including self-preferencing their own products in search results, utilizing personalized pricing algorithms to charge consumers higher prices, negotiating concessions from suppliers, and creating ecosystems of complementary products or services which are tied together.

Below, we briefly cover a few of the issues present in digital markets, including 1) Big Tech mergers, 2) Infrastructural power, 3) Data privacy and security, and 4) Content moderation, free speech, and curatorial power.

Big Tech Mergers

One challenge with technology markets and mergers (though not unique to the sector), is that many firms engage in serial acquisitions, buying up nascent competitors before they have a chance to compete. And these deals fly under the regulatory radar, because merger filing thresholds often do not capture small deals (e.g. the Hart-Scott- Rodino Act in the United States (HSR) only requires that companies report transactions to the Federal Trade Commision if they are valued at over $101 million). Serial acquirers rolling up industries with many small transactions are often never seen or reviewed by antitrust enforcers. To give a sense of the potential scale of the problem, in 2021 there were 21,994 total merger transactions (both public and private) in the United States, yet under 20% – only 4,130 – were reported to the FTC. Similarly, in 2020, there were a total of 16,723 transactions, and only 1,637 – under 10% – were reported.[69]

The FTC noted this problem in a September 2021 report showing that from 2010 to 2019 Alphabet, Amazon, Apple, Microsoft, and Facebook (now Meta) acquired 616 companies in a spree of acquisitions.[70] Only 94 (or about 15%) of those acquisitions were filed with the agency. The remaining acquisitions fell below the HSR thresholds ($92 million at the time of the study) and were therefore conducted without direct antitrust oversight.[71] FTC Commissioner Rebecca Slaughter put it this way: “I think of serial acquisitions as a Pac-Man strategy. Each individual merger viewed independently may not seem to have significant impact. But the collective impact of hundreds of smaller acquisitions, can lead to monopolistic behavior.”

Additionally, firms may engage in ‘killer acquisitions’ in which they acquire companies to neutralize or absorb competitive threats.[72] They also may employ a ‘buy vs. build’ strategy, which means they spend less on internal research and development (R&D), and rather acquire promising technology or IP before it is successfully commercialized or scaled.[73] All of this impacts

69 Steve Gelsi, “M&A activity cooled in the fourth quarter – but it still topped $1 trillion,” Market Watch, March 9, 2022, https://www.marketwatch.com/story/m-a-activity-cooled-in-the-fourth-quarter-but-it-still-topped-1-trillion-11646850279?mod=search_headline.

70 Lina Khan and Noah Phillips, et al., “Non-HSR Reported Acquisition by Select Technology Platforms, 2010-2019: An FTC Study,” Federal Trade Commission, September 2021, https://www.ftc.gov/news-events/news/press-releases/2021/09/ftc-staff-presents-report-nearly-decade-unreported-acquisitions-biggest-technology-companies. The FTC used its authority, given by Section 6(b) of the FTC Act, to conduct the market study – which can occur at any time.

71 Ibid.

72 Nicolo Zingales and Bruno Renzetti, Digital Platform Ecosystems and Conglomerate Mergers: A Review of the Brazilian Experience, World Competition, December 9, 2022, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4264806.

73 Gregory Crawford, Tommaso Valletti, and Cristina Caffarra, ‘How tech rolls’: Potential competition and ‘reverse’ killer acquisitions, May 11, 2020, https://cepr.org/voxeu/blogs-and-reviews/how-tech-rolls-potential-competition-and-reverse-killer-acquisitions.

innovation and which products reach the market.[74] Often a monopoly is disincentivized from commercializing new products which are not core to their business model.

Infrastructural Power

While perhaps one of the most significant economic and technological shifts in our lifetime, the advent of artificial intelligence (AI) will only serve to exacerbate the concentration of existing infrastructural power in the tech sector. The major technology companies including – Google, Apple, Meta, Amazon, and Microsoft – now use their vast data pools in combination with their software programs and hardware, to vertically integrate their capabilities and resources to further entrench their dominance. As the ability to process vast data caches requires the world's most powerful supercomputers, available mostly to the largest players, market power considerations become paramount. Competition policy and law can play an important role in ensuring fair market functioning, challenging monopolization or abuses of dominance, and in stemming further consolidation, particularly as many apps and tech stacks will be built on top of the existing tech giants' programs and are at risk of acquisition.[75]

Cloud services – another critical commercial infrastructure for AI and beyond – are also highly concentrated. According to a report from the Carnegie Endowment for International Peace, "market concentration reduces competition, amplifies the risks posed by cloud outages, and potentially creates a situation wherein massive market dependence on a handful of cloud providers might encourage them to assume business risks that would have to be borne by governments and major customers."[76] Additionally, there are concerns about rising barriers to entry for new entrants or creating customer lock-in,[77] in addition to data security concerns. Many global antitrust authorities have recently investigated cloud computing and cloud storage providers.[78]

Data Privacy and Security

While data privacy and security are predominantly issues of consumer protection – competition authorities often co-house consumer protection under their mandate. While competition policy can play a role in combating so-called 'data-opolies,' complementary regulations and legislation on data sharing, interoperability, and privacy are necessary to combat the negative ramifications of consumer surveillance for targeted advertising.

74 Kevin A. Bryan and Erik Hovenkamp, Startup Acquisitions, Error Costs, and Antitrust Policy, University of Chicago Law Review: Vol. 87: Iss. 2, Article 3, https://chicagounbound.uchicago.edu/uclrev/vol87/iss2/3/.

75 Barry Lynn, Max von Thun, Karina Montoya, "AI in the Public Interest: Confronting the Monopoly Threat," Open Markets Institute, November 2023, https://www.openmarketsinstitute.org/publications/report-ai-in-the-public-interest-confronting-the-monopoly-threat.

76 Carnegie Endowment for International Peace, Effects of Cloud Market Concentration, Cloud Governance, 2021, https://cloud.carnegieendowment.org/cloud-governance-issues/effects-of-cloud-market-concentration/.

77 Opara-Martins, J., Sahandi, R. & Tian, F. Critical analysis of vendor lock-in and its impact on cloud computing migration: a business perspective. *J Cloud Comp* 5, 4 (2016), https://journalofcloudcomputing.springeropen.com/articles/10.1186/s13677-016-0054-z.

78 See: "FTC Seeks Comment on Business Practices of Cloud Computing Providers that Could Impact Competition and Data Security," Federal Trade Commission, March 22, 2023, https://www.ftc.gov/news-events/news/press-releases/2023/03/ftc-seeks-comment-business-practices-cloud-computing-providers-could-impact-competition-data; "CMA launches market investigation into cloud services," press release, Government of United Kingdom: Competition and Markets Authority, October 5, 2023, https://www.gov.uk/government/news/cma-launches-market-investigation-into-cloud-services; Maxence Lepinoy, "Cloud computing: the Autorité de la concurrence issues its market study on competition in the cloud sector," Autorité de la Concurrence, June 29, 2023, https://www.autoritedelaconcurrence.fr/en/press-release/cloud-computing-autorite-de-la-concurrence-issues-its-market-study-competition-cloud.

Big Tech firms increasingly create walled gardens of data enclaves that serve to build or maintain their dominance.[79] Some antitrust authorities have made the case that the collection of vast data caches is a form of leveraged market power itself, available mostly to the largest players.

Concerns about data exploitation can be considered in antitrust cases as a form of consumer harm, and they can also be quantified economically.[80] For example, the imposition of exploitative terms and conditions about data collection and use was a concern that led several competition and consumer protection authorities around the world to challenge WhatsApp's (owned by Meta) privacy policy update announced in 2021.

Content Moderation, Free Speech, and Curatorial Power

Another ramification of concentrated market power is that superstar firms can erode democracy by influencing the flow of information in society and by dictating the public agenda. Digital monopolists have reshaped our information and communication ecosystem in historic and novel ways.[81] Algorithmic systems used for content curation by large social media networks will continue to shape and impact every individual's information diet.

Additionally, concentration in ad publishers, and in traditional – as well as social – media platforms, have had significant impacts on news distribution. A number of countries are currently addressing or are planning to address the relationship between digital platforms

79 Data Exploitation, Privacy International, 2023, https://privacyinternational.org/learn/data-exploitation; and Kean Birch, Data Enclaves, 2023, https://link.springer.com/book/10.1007/978-3-031-46402-7.

80 Nicholas Economides, Ioannis Lianos, Restrictions On Privacy and Exploitation In The Digital Economy: A Market Failure Perspective, *Journal of Competition Law & Economics*, Volume 17, Issue 4, December 2021, Pages 765–847, https://doi.org/10.1093/joclec/nhab007.

81 Carnegie Endowment for International Peace, *supra* note 76.

and news: both Japan and South Africa have opened a sector inquiry, and in 2023, Meta began blocking news in Canada in response to legislation requiring the company to negotiate payment with news organizations. And in 2021, (then) Facebook temporarily blocked news on its platform across Australia until an agreement was reached. These cases demonstrated the incredible curatorial power of the digital platforms, but the problem is rooted in the fundamental incentives and advertising-driven business models of platforms which impact the quality of news production.[82]

In addition, debates about free speech and content moderation on social media platforms have made firms de facto private regulators as they grapple with how to police online speech. Much of the decisional or curatorial power over fundamental human rights is now in the hands of platforms, rather than public regulators.[83] More sensationalist content leads to problems of misinformation, disinformation, fake news, and other issues that are not easily solvable without a lack of democratic debate and discussion about what constitutes the boundaries of free speech or harmful content.

82 Josef Drexl, Competition Law in Media Markets and its Contribution to Democracy – A Global Perspective, World Competition Law and Economics Review, Vol. 38, Issue 3, 2015, Max Planck Institute for Innovation & Competition Research Paper No. 14-16, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2511146; Maurice E. Stucke and Allen P. Grunes, Toward a Better Competition Policy for the Media: The Challenge of Developing Antitrust Policies that Support the Media Sector's Unique Role in Our Democracy, Connecticut Law Review, Vol. 42, 2009, University of Tennessee Legal Studies, January 23, 2009, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1330681; and OECD (2021), Competition issues concerning news media and digital platforms, OECD Competition Committee Discussion Paper, https://www.oecd.org/daf/competition/competition-issues-in-news-media-and-digital- platforms.htm.

83 Orla Lynskey, Regulating 'Platform Power,' LSE Legal Studies, April 2017, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2921021.

Conclusion and Relevant Civil Society Organizations

While it is impossible to cover the range of nuances and harms emanating from concentrated markets, and sector or regionally-specific dynamics, this document is meant to provide a snapshot of the core ways in which a lack of robust competition policy enforcement undermines stakeholders, democracy, and well-functioning markets.

For this reason, we encourage readers to follow and contact the following civil society organizations which regularly produce research and policy briefings on market power issues across various countries, themes, and sectors. This list is not exhaustive — please feel free to contact us if other organizations should be added. (Email: denise.hearn@columbia.edu).

Civil society organizations focused on market power issues, listed alphabetically:

- American Economic Liberties Project, USA
- Article 19, UK and EU
- Balanced Economy Project, EU, UK, and Global
- BEUC (The European Consumer Organization), EU
- Canadian Anti-Monopoly Project, Canada
- Center for Technology and Society, Brazil
- Centre for Competition, Regulation and Economic Development, University of Johannesburg, South Africa
- Common Wealth, UK
- Corporate Europe Observatory, EU
- Data Privacy, Brazil
- Global Justice Now, UK
- Institute for Local Self Reliance, USA
- Institute for Public Policy Research (IPPR), UK
- IT for Change, India
- Lobby Control, Germany
- Observatoire des multinationales, France
- Open Markets Institute, USA and EU
- Privacy International, Global
- Public Knowledge, USA
- Rebalance Now, Germany
- Rethink Trade, USA
- SOMO, The Netherlands
- Third World Network, Global

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