Taken, not earned

How monopolists drive the world's power and wealth divide

January 2024

About the report partners

The Balanced Economy Project is an international organisation founded in the UK in 2021. Their goal is to hold powerful corporations to account and to reclaim the ability of present and future generations to continually restructure our economies, by collectively constraining corporate power.

Global Justice Now is a democratic social justice organisation working as part of a global movement to challenge the powerful and create a more just and equal world. Global Justice Now mobilises people in the UK for change, and acts in solidarity with those fighting injustice, particularly in the global south.

SOMO investigates multinationals. Since 1973, as the Centre for Research on Multinational Corporations, they have been working towards transforming the economic system by restraining corporate power and advocating for social justice. SOMO works through long-established partnerships on five continents.

LobbyControl is a civil society initiative that provides information on lobbying, PR campaigns, and think tanks and promotes transparency and democracy in Germany and on the European level. LobbyControl was founded in 2005 and is part of the European Alliance for Lobbying Transparency and Ethics Regulation (ALTER-EU).

Acknowledgments

This report was written by Nicholas Shaxson and Claire Godfrey (Balanced Economy Project) with significant contributions from Nick Dearden (Global Justice Now), Margarida Silva (SOMO), and Max Bank (Lobby Control). We are grateful for advice and contributions from Michelle Meagher (Balanced Economy Project), Irene Keizer (SOMO), Audrey Gaughan (SOMO), Rodrigo Fernandez (SOMO), Çağrı Çavuş (SOMO), and Daisy Pearson (Global Justice Now).

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Contents

Summary

The world's wealthiest billionaires have a common secret hiding in plain sight: they are monopolists. Much of their wealth and income was taken, not earned.

This report focuses on how a handful of individuals and their companies have built positions of market and strategic dominance where they've become too big to fail, too big to trust, and 'too big to care'. They have accumulated so much strategic power that they make decisions that deeply affect the lives of all of us.

Monopoly power has brought extreme wealth to billionaires while harming the rest of humanity.

Our new data reveals how some of the world's richest billionaires have accumulated wealth through industries so dominant and influential that they can leverage their power to suck wealth out of our societies. We look at the deep damage this power inflicts on the public and the planet, and examine the 20 richest firms in the world - many of which are owned or controlled by the top 20 billionaires. What our main research exposes is that these firms are able to set sale prices in the markets they dominate significantly higher than the bottom 50% of firms.

For the five years to 2022, we find that for the top 20 companies the average "markups" – meaning the difference between the selling price of goods or services and their cost – has risen to around 50 percent. This is double the 25% average markup for the bottom 50% of firms studied. This indicates they are using their monopoly power in these markets to hike prices, and keep them high, ripping consumers off in the process, just because they can.[1]

In effect, **we are paying a private tax to billionaires** - at a time when millions of ordinary people across the world are suffering amid the cost of living crisis[2],

deepening the extreme inequality gap. These monopolies are also using their dominant position in markets to squeeze out smaller firms: harming the business environment and overall economic prosperity.

> Monopoly power undermines democracy, manipulates people in insidious ways, and fundamentally alters how we communicate with each other.

The report goes on to show how far monopoly power extends across the world economy, the tricks that the monopolists use, the resulting harms, the hidden **'system of monopoly' that protects their power**, how this power is reinforced by extensive lobbying capacity, and what we can do about monopoly.

Regulators are charged with challenging monopolies. Yet, they are either lulled into a false assumption that monopolies automatically bring benefits to consumers, or are prey to businesses with excessive market power, influence and lobbying capacity. New research reveals that the European Commission only prevented 0.7 percent of mergers between 2005 and 2023,[3] illustrating these impacts.

Laws, such as competition policy, can be used to challenge harmful monopoly power by breaking dominant firms up, or by enforcing tighter merger controls. The Balanced Economy Project, SOMO, Global Justice Now, and LobbyControl are also calling on governments to use public interest regulation, such as treating dominant firms that provide a public good or essential service as public utilities, or bringing them into public ownership; rewriting international trade, investment, and finance regimes to curb excess concentrations of corporate power and associated harms; and, restricting corporate monopolies' lobbying influence by strengthening conflict of interest rules and by enhancing the transparency of political institutions.

It is well within the reach of governments to reclaim, break, and redistribute monopoly power for the benefit of society and future generations.

We all have a role to play in holding government accountable when they fail to rein in the dangerous power of monopolies.

1. The increasing dominance of the billionaire monopolists

In recent decades, the size of a handful of mega-corporations has soared to extreme levels, as markets have become ever more concentrated, and the private power of the few is increasingly used to dictate how our economies operate.

Take our global food systems, for example. Four firms control half of the world's commercial seed market, while the top two control 40 percent of global sales. Regarding agrochemicals, four companies control over 60 percent, while 62 percent of animal pharmaceuticals are in the hands of four corporations. Half of the world's farm machinery market is dominated by six businesses, and just three multinationals supply nearly 100 percent of commercial poultry genetics.[4]

Graph 1

Source links: Global Justice Now / ETC Group

And it's getting worse. In the last few months, the global crop merchant, Bunge, announced plans to buy its rival, Viterra, in an US$8.2 billion mega-deal.

The result of this concentration is massive profits for the remaining players. The four food companies that control an estimated 70-90 percent of the world's grain market saw an estimated US$21 billion rise in profits during the Covid-19 pandemic.[5]. Cargill alone tripled its net annual income from 2020 to 2022, and the number of Cargill family members who joined the billionaire club reportedly rose from eight to 12.[6] The companies that transport our food, and many other items, have also made record profits: the shipping company Maersk, for instance, saw its profits rise tenfold over the same period to US$30 billion.[7] More broadly, large food and energy companies made US$306 billion in excess windfall profits in 2022, according to Oxfam, paying 84% of that to shareholders.[8]

But it's not only our food system: take global banking, where 29 banks are officially classed as "Too Big To Fail".[9] If one were to collapse, it could risk financial chaos, so governments and taxpayers would have little choice but to bail them out - as happened in the last global financial crisis, while bankers largely got off scot free.[10] These finance giants are the products of hundreds of mergers and acquisitions.

Meanwhile, the technology that governs so much of our daily lives has been captured by a handful of extremely powerful corporations. Google holds a 90 percent market share in online search globally, while 99 percent of the world's operating system market share is split between its Android and Apple's iOS. In some countries, up to 90 percent of online shoppers use Amazon, the e-commerce behemoth.[11]

Monopoly is everywhere

Beyond Big Tech, we have Big Pharma, giant energy firms, dominant ride-sharing and hotel-booking platforms, global commodity traders, and giant supermarket chains. Add to that, the Big Four accounting firms, the Big Two global asset managers, the Big Three music labels, four companies dominating the world beer market, powerful media firms, and moguls,.

1.1 What is monopoly power?

Definitions and metrics

A monopoly is commonly understood to be a single seller in a market, but this interpretation is too narrow to capture reality, and also inaccurate in law. The definition we use here is one used by many regulators: **a monopoly is shorthand for a firm with significant and enduring market power, and which can act independently without needing to consider the responses of competitors, customers, workers, or even governments.**[12]

A key, and better known, feature of monopoly power is **the ability of a firm to influence or control the terms and conditions on which goods are bought and sold.** Firms intent on profit-maximising use market power to charge higher prices than if an industry was more competitive.[13]

Yet the externalities run far wider and deeper than just manipulating prices of goods and services, as this report shows. Monopoly power is measured or distinguished in several ways: concentration ratios or market shares; excess profits; barriers to entry that keep out competitors; lobbying power; or the power to raise prices above costs, which will be the main metric in this report.[14]

Anti-trust/competition rules

Three central purposes of competition law are to prevent monopoly power and harms arising through economic concentration - through merger control, to prevent that power being abused, and to prevent agreements between competitors that harm people. Competition authorities in most countries have laws to prohibit anti-competitive agreements between market players, and to prevent dominant players abusing their dominant positions. The EU (and national equivalents) laws, for example, include 'abuse of dominance' laws that cover exploitative abuse of dominant position (such as limiting production to increase prices and profits but disadvantaging customers who cannot easily move elsewhere), as well as exclusionary abuses, which is where dominant companies use their muscle to exclude competitors and close down competition. These laws are backed by significant investigative and fining powers.[15] While powerful, these laws can still be significantly expanded, and strengthened.

Merger control or failure – new analysis

With tighter merger control we could prevent firms reaching dominance or extending their dominance over other markets. Big Tech firms are particularly active with Mergers and Acquisitions (M&As), acquiring over 1,000 companies in just ten years. Until 2021 no regulator, anywhere, blocked a single acquisition.[16]

Research published in January 2024 by the Hertie School in Berlin looked at the European Commission's performance at blocking mergers. It shows how 6,462 mergers have been notified to the European Commission since 2004. Yet, of those, only 14 were prohibited, and 30 more abandoned after investigations by the Commission. That makes a total of 44 out of 6,462 mergers prevented – around 0.7 percent.[17] In addition, recent research by the privacy-focused firm Proton in 2024 revealed that Big Tech firms had already taken in enough revenue by January 8th to pay off all their worldwide fines in the previous year.[18]

1.2 Winners and losers in a monopoly economy

The winners take it all

The beneficiaries of monopoly are well known. This table shows the world's 20 richest billionaires, from the Forbes 2023 list,[19] along with the 20 biggest firms, by market capitalisation, which means the market value of a company trading on the stock market. A significant overlap exists between the lists.

Table 1

Billionaire and global ranking	Wealth US$bn	Company and global ranking	Market value US$bn
1. Bernard Arnault	211	19. LVMH	355
2. Elon Musk	180	9. Tesla	639
3. Jeff Bezos	114	5. Amazon	1,403
4. Larry Ellison	107	9. Tesla	639
5. Warren Buffett	106	8. Berkshire Hathaway	747
6. Bill Gates	104	2. Microsoft	2,555
7. Michael Bloomberg	95		
8. Carlos Slim	93		
9. Mukesh Ambani	83		
10. Steve Ballmer	81	2. Microsoft	2,555
11. Bettencourt & family	81		
12. Larry Page	79	4. Alphabet / Google	1,569
13. Amancio Ortega	77		
14. Sergey Brin	76	4. Alphabet / Google	1,569
15. Zhong Shanshan	68		
16. Mark Zuckerberg	64	7. Meta / Facebook	788
17. Charles Koch + family	59		
18. Julia Koch + family	59		
19. Jim Walton	59	14. Walmart	442
20. Rob Walton	58	14. Walmart	442

Source: Forbes' Billionaires list, 2023 for Top 20 wealthiest people.

Table 2

Company ranking	Market value US$bn
1. Apple	2,688
2. Microsoft	2,555
3. Saudi Aramco	2,138
4. Alphabet / Google	1,569
5. Amazon	1,403
6. NVIDIA	1,028
7. Meta / Facebook	788
8. Berkshire Hathaway	747
9. Tesla	639
10. Eli Lilly	525
11. United Health	493
12. Visa	491
13. TSMC	451
14. Walmart	442
15. Novo Nordisk	434
16. ExxonMobil	421
17. JPMorgan Chase	402

Companies ranked by market capitalisation, companiesmarketcap.com, Nov 1, 2023.[20]

At least half of the top 20 richest billionaires are classic, deliberate monopolists whose companies have at times enjoyed market shares of up to 90 percent in their domains.[21] They include billionaires such as Jeff Bezos of Amazon, Bill Gates of Microsoft, and Sergey Brin and Larry Page, both of Alphabet/Google. The remaining billionaires on the Forbes 2023 list are not widely thought of as monopolists, but all have enjoyed concentrated market power as a central underpinning of their wealth. The financier Warren Buffett, for instance, is widely lauded as a folksy, canny investor. In reality, he is an ardent monopolist who has stated that "the single-most important decision in evaluating a business is pricing power… if you have to have a prayer session before raising the price by 10 percent, then you've got a terrible business."[22]

Many see Elon Musk, founder of the electric vehicle manufacturer Tesla, as an innovator - which he is. Yet he has also profited from extensive market dominance. Tesla had a 79 percent market share of new US electric vehicle sales in 2020, and although that has since fallen sharply as other carmakers enter the market, it still represents a towering dominance.[23] Meanwhile, one of Musk's other companies, SpaceX, has for some time been the only way Nasa can get US rockets into space from US soil, and his ownership of Twitter (which he rebranded as X) gives him huge political and cultural clout.[24] Alongside this, his Starlink satellites have been Ukraine's main form of battlefield communications. As reported in US media, a Pentagon official said how they "are living off his good graces", and "that sucks."[25]

When we take a step back, we can see this concentration and domination in the economy as a whole. This contrasts with the 1930s, for example, when the share of the US economy dominated by the top 0.1 percent of companies, ranked by assets, was less than 50 percent. Now it is almost 90 percent.[26] Meanwhile, the number of mergers and acquisitions (M&A) worldwide has risen from 2,676 in 1985 to over 62,000 in 2021, almost unopposed by regulators.[27]

This concentration has driven massive economic inequality.

- The amalgamated market value of the top 20 companies on our list is US$18 trillion. This is equivalent to the GDP of France, Germany, India, Brazil, South Africa and the United Kingdom combined.[28]
- The US$5.1 trillion market value of the two biggest companies in the world, in our table, is equivalent to the combined wealth of 53 percent of the world population – or 2.8 billion people.[29]
- The world's 2,640 billionaires collectively own significantly over twice the wealth of the bottom 2.8 billion.[30]
- The world's richest person, Bernard Arnault, of the world's largest luxury goods company LVMH, has well over a million times the wealth of the average person in the poorest half of the world's population.[31]

I'm a loser, baby

The thread that connects the winners to the losers is power: the power that the small number of winners enjoy to extract wealth from, to restrict the freedoms of, and to manipulate or steer the vastly larger numbers of losers. Increasingly, monopolists sit astride chokepoints in our economies, which producers and consumers must pass through to access each other. This power, officially described as "gatekeeper" power,[32] allows them to effectively set mandatory conditions and fees on those who rely on them. Through this power, monopolists levy 'hidden' private taxes not just on consumers but also on small businesses in their thrall, thus muscling in on one of the ultimate prerogatives of state power: taxation.

Amazon, for example, is so indispensable for online sellers, that it now takes in fees of around half their sales value when logistics are included, up from around 20-30 percent a decade ago. Amazon is so powerful, in fact, that as a lawsuit by the US Federal Trade Commission explains, it is able to raise prices not just on the Amazon marketplace, but off it too.[33]

Such hierarchical, extractive power relationships are widespread: between dominant supermarkets and farmers; between Uber and its drivers; between Apple and its app store developers; between the Big Three music labels and musicians - the list goes on. The relationships are so hierarchical that some talk about "techno-feudalism" - but words like 'feudal' or 'serfdom' are present across many different sectors.[34]

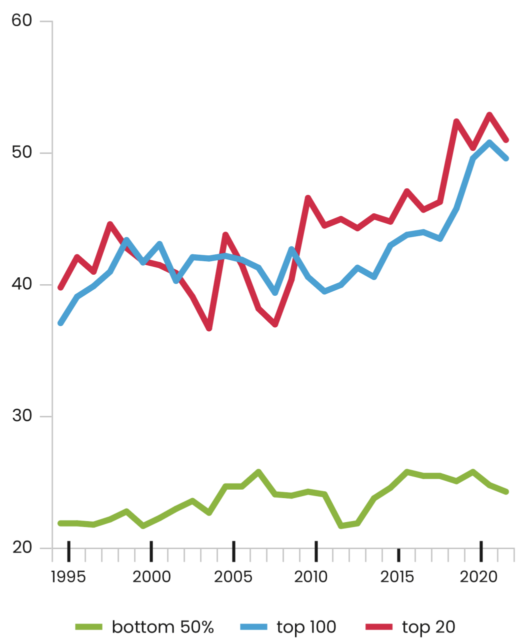
Monopoly power inflicts different harms on different parts of society: consumers, workers, smaller businesses, and citizens

The hit to consumers

One of the clearest ways to illustrate the power to extract wealth is through what economists call "markups". This is basically the difference between the sale prices of goods and services, and the costs of materials used to produce them.[35]

Our new analysis shows major global trends in markups, which tell three scandalous stories.

Graph 2: Global Markup, 1995-2022



Source: authors' calculations based on Worldscope Refinitiv data. See footnotes 1 and 2

First is the case of corporate inequality. Graph 2 shows the biggest firms charge the highest markups, while many smaller firms struggle to eke out any profit. Markups for the top 100 averaged 43 percent since 1995, versus 24 percent for the smallest 50 percent of firms. In the past three pandemic-hit years, markups rose to almost exactly 50 percent for the biggest companies versus 25 percent for the smallest.[36] Even the bottom 50 percent in our table are those with a known market capitalisation: much larger numbers of firms are significantly worse off than this. Meanwhile, firms with high markups have grown to become the world's biggest and most powerful. High markups contribute to high profits, and high market value.

Second, average markups for the biggest firms (see Graph 2) have risen sharply over the period 1995 - 2022, while the average markups of smaller companies have barely changed. Other research has found similar patterns. For example, research by Jan de Loecker, Jan Eeckhout, and Gabriel Unger using different methods, found average markups rising from around 10-20 percent over costs in 1980, to approximately 40 percent in Asia, 60 percent in Europe, and 80 percent in the United States.[37]

Monopoly power is rising, becoming more concentrated, at the expense of everyone else

Third, the biggest firms used their power to price-gouge during the COVID-19 pandemic, while the weaker firms couldn't. Research by Isabella Weber and others has coined the term "sellers' inflation", also known as "greedflation", where companies took advantage of supply bottlenecks during the pandemic to build "temporary monopolies" to jack up prices far beyond their costs, contributing not only to soaring profits, but to devastating inflationary surges and reinforcing more permanent monopolies.[38]

Profits and markups: close relatives

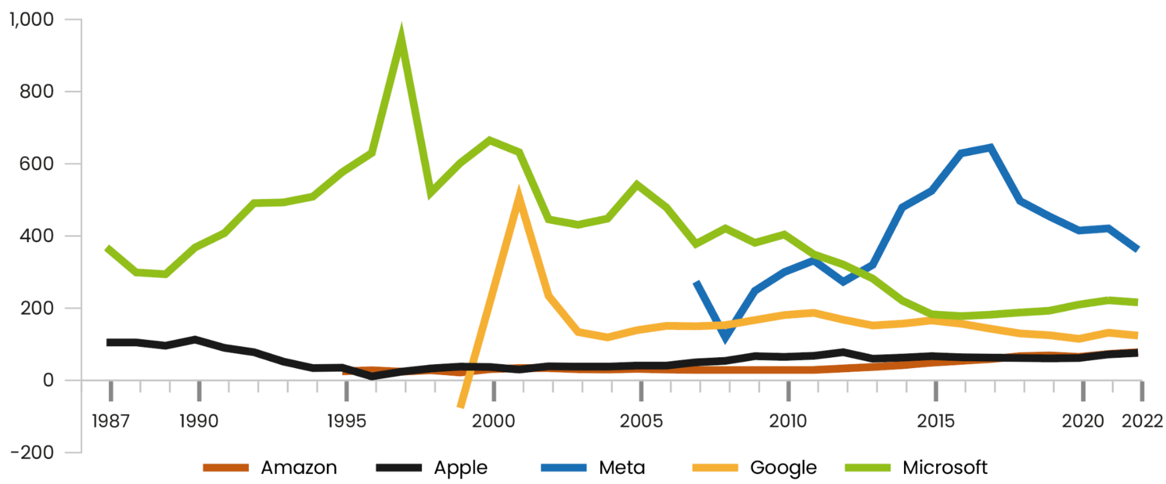
High profits, which are benefits to the winners, are closely related to excessive markups, which are like private taxes paid by the losers. For example, if the cost of materials used to create a product is US$10, a smaller firm might sell that product for $12.50, making a sufficient profit margin to operate, while the monopoly firm has power to charge $15 instead. The difference - $2.50 in this instance - is like a private tax consumers pay to wealthy owners. These oblique private taxes, levied on the rest of us by those with monopoly power, are a key connecting thread between wealth and poverty; their extra income is our loss.

Other studies have found that this price "profiteering" has accounted for 45-50 percent of recent inflation in Europe, the US, and Australia.[39] Research found that US firms boosted their markups and profits in the pandemic at the fastest rate since 1955.[40] This inflation increase has spurred a cost of living crisis, with many unable to afford even the basics for survival. In the UK, for example, approximately 3.8 million people experienced destitution in 2022, including around one million children, almost two and a half times the number in 2017.[41]

These average markups hide a varied picture, sector by sector.

Our case study on Big Pharma highlights how much these markups can cost individual countries. The UK's National Health Service has been charged markups worth at least GBP£2bn for Covid-19 vaccines - six times the cost of the pay rise the government agreed to give nurses last year. That is based on Pfizer charging £18-22 a shot versus £5 estimated costs. In the US, it is charging US$85 a dose.[42] In Big Tech, markups rise many hundreds of percent. Their supposedly "free services" create revenues to them, which ultimately show up as hidden costs elsewhere.[43]

Graph 3: Big Tech Markup, 1987-2022

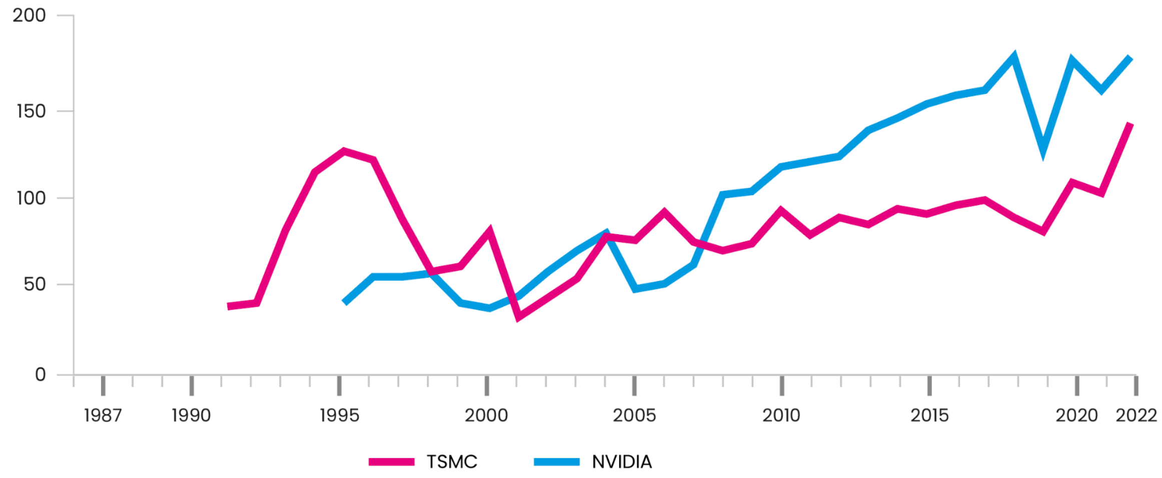


Source: Bloomberg data

Markups in Big Tech are currently at 75 percent and more, and historically have gone as high as nearly 1,000 percent, meaning they charged people for goods and services ten times as much as it cost to produce them. The story of Microsoft in *Graph 3*, for example, shows the rise of immense monopoly power, followed by successful antitrust action by US regulators in the 1990s: something we can achieve again, as Section 5 explains.[44]

Semiconductors, suffusing the fabric of our increasingly electronic lives, show even higher markups.

Graph 4: Markups for Semiconductor firms 1987-2022



Source: Bloomberg data

Both TSMC, the world's largest chipmaker, and NVIDIA have immense monopolistic power in this space: their markups mean higher prices for almost all electronic goods and services.

The inevitable hit to workers

In the same way that dominant firms impose unfair trading practices upon consumers and trading partners, they are also able to impose employment conditions that strengthen employers' power over individual workers, particularly where labour markets are concentrated. Competition authorities worldwide are, for example, increasingly concerned about unfair labour practices, like "wage fixing" and "non-poaching" agreements in digital markets.[45] Trade unions are also reporting an increasing use of algorithms unilaterally rating workers or creating lock-in effects, making it more difficult for the individual worker to change employer. Similarly there has been a surge of "non-compete" clauses, preventing employees from working at a competitor. Without strong resistance, these types of practices threaten to embed as norms, rather than exceptions, unfurling abusive employment conditions to all other workers.[46]

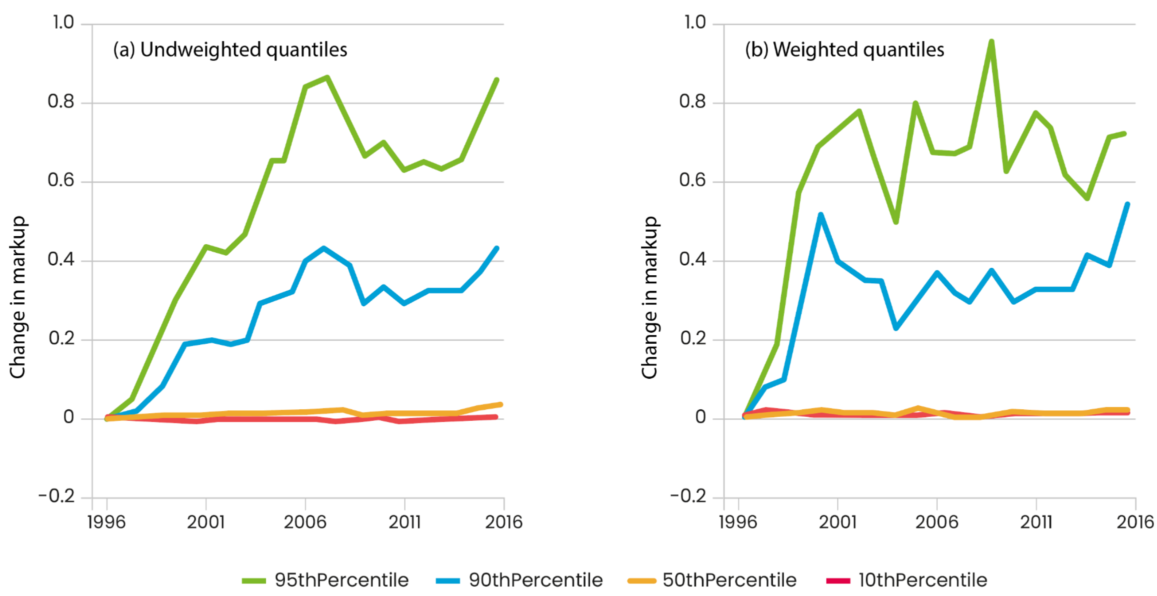
Over decades, the share of global income going to labour or workers has shrunk, as company owners have been able to funnel an ever larger share towards themselves.[47] It is estimated that if workers had the same share of global income as in 1980, they would collectively earn US$6 trillion more each year, and annual global GDP would be US$8 trillion bigger.[48] That is 10-15 times more than the estimated US$500 billion in annual global losses to tax havens.[49]

There are other reasons beyond monopolisation, notably globalisation and technological change, but many economists concur that monopoly is at the heart of this story, and anti-monopoly must be at the core of any lasting solutions.[50]

The hit to smaller businesses

As our research shows, the smallest half of firms measured by market value, have lower markups than firms with dominant positions in the market, and don't have the ability to exert pricing power. Other research, ranking firms by markup, shows an even more dramatic pattern.

Graph 5: Ranking firms by markup



Source: *[Firms and Inequality](), IFS Deaton Review,*
Jan de Loecker, Tim Obermeier, John van Reenen, 2022.

The winners enjoy large and rising power to jack up prices, while the losers flatline. And in the pandemic, global surveys found that 70-80 percent of small and medium enterprises (SMEs) suffered major declines in revenues.[51]

Global supply chains are dominated by "lead firms" that centrally organise production systems which, as one food analyst put it, "extract much of the value along the chain, while costs and risks cascade down on to the weakest participants, generally the farmers and labourers at the bottom."[52] This can hit farmers in countries at all income levels. A survey in October 2023 found that half of UK fruit and vegetable farmers said they expected to go bust in the next 12 months, with most blaming giant supermarkets.[53]

This goes far beyond farming: these extractive relationships strike multiple smaller businesses that are in monopolists' thrall, so it is not just consumers but also other businesses that in effect pay large private taxes. Monopolies also crush rivals or buy them in "killer acquisitions," further damaging business ecosystems. As one meta-study put it, the vast majority of research looking at horizontal mergers and acquisitions (M&As) finds "large negative effects on innovation."[54]

Monopolies are destroying our planet

Billionaire investment and control of many of the world's largest and most powerful firms gives them enormous influence over their carbon emissions and environmental impact. This entrenched power is stripping us of our ability to tackle climate change and environmental harm.

Those firms with excessive corporate power are able to shape an economy based on destructive production and consumption patterns.[55] Food monopolies, for example, are intensifying agricultural production in ways that both produce more emissions and which leave us vulnerable to climate impacts by increased use of monoculture crops.

Monopolies have also encouraged the growth of environmentally destructive practices like built-in obsolescence. Apple has for years been criticised for preventing third-party service and software installation, allowing for, in the words of Cory Doctorow: "Apple to decide when an iPhone is beyond repair and must be shredded and landfilled as opposed to the iPhone's purchaser… This is a very useful power to wield, especially in light of CEO Tim Cook's January 2019 warning to investors that the company's profits are endangered by customers choosing to hold onto their phones for longer rather than replacing them."

Dominant banks and investors are a big part of fuelling the ecological crisis. In the finance sector, Greenpeace shows, since the Paris Agreement was signed, 33 major global banks have collectively poured US$1.9 trillion into fossil fuels.[56] At an individual level, the investments of a billionaire are tantamount to emitting a million times more greenhouse gas than the average person.[57]

Even if these investments generate short-term profit, they will inevitably cause economic catastrophe alongside the climate emergency.[58]

Energy markets, like many others, continue to consolidate towards ever stronger monopoly power, as we see from a recent US$65 billion deal by ExxonMobil to buy Pioneer Natural Resources,[59] and Chevron's US$60 billion deal to buy Hess.[60] Mergers and acquisitions (M&A) are often, in effect, like formalising and legalising cartels - and these ones should be stopped, for the greater good. These types of mergers boost a company's political power, including their potential to oppose efforts to tackle climate change. Oil major Exxon, for example, has recently been shown to have intentionally undermined climate change science for decades, even though corporate executives understood the damage they were doing. Concentrations of power in energy markets block our efforts to prioritise environmentally sustainable policies amid the climate emergency.[61]

More monopoly billionaires means more climate change

Competition policy, and its robust enforcement, is overlooked as a tool to tackle the contribution of monopolies in tackling climate change and promoting environmental sustainability.[62]

The threat to how we communicate, and organise

Liars, blowhards, and trolls have been around since the beginning of the political discourse. Some of the worst lies have come out of governments, even democratic ones. Nevertheless, the rise and monopolisation of online communications has created severe, immediate, and particular new harms in the past decade or so. These include the rapid acceleration of dangerous content, alongside mis-and dis-information, enabled by dominant and pervasive social media firms, combined with their monopolisation of online advertising, which is sucking the lifeblood out of traditional and local media firms that have been the cornerstones of democracy.[63]

Monopoly power, by removing user choice,[64] has given a few dominant firms the power to manipulate or steer our ideas, beliefs and behaviours, for profit.[65] They have found that they can maximise their profits by preying on our greatest hopes and fears, to keep us clicking furiously: more clicks means more data to sell to advertisers, which means more wealth for the monopolists. In the name of profit, they serve us each our own curated reality tailored to enrage and engage. In so doing, they have created a system of near total surveillance that threatens individuals and communities, amplifies hateful and harmful content, and contributes to the deterioration of the digital public sphere.

> "Facebook created this world of… three billion Truman Shows, where each person gets their own world, their own set of facts, with constant reinforcement."
>
> Roger McNamee, a former adviser to Facebook founder Mark Zuckerberg[66]

In her 1951 book *The Origins of Totalitarianism*, Hannah Arendt described totalitarian movements as "mass organisations of atomised, isolated individuals." This is precisely what social media giants are pushing us towards: a world where each of us can be steered and discriminated against,[67] so we are atomised in our own reality. As this happens, we increasingly lose our ability to form and express independent thought, and organise around shared projects to promote the public good. Without greater public intervention to limit the power of Big Tech, new technologies like AI will supercharge these harms.

2. The sources of billionaire wealth

In tracking the origin of the top billionaires' wealth and clout, a common pattern or life cycle emerges. First, they innovate to build better goods or services to grow market share. Next, they win dominance, where they defend and reinforce their monopoly, stifle competitors, externalise environmental and social costs, and ensure they pay minimal tax.

Monopolists become, as US regulator Lina Khan put it, "too big to care." [68]

Once the monopoly is secure, they milk it for profit, and reinvest some of the proceeds in lobbying, to keep the gravy train running. Facebook, for instance, has had years to fix toxic online content, but its monopoly power allows it not to worry too much that better firms will usurp them.

2.1 Monopoly, by sector, by company, and by billionaire

Monopoly power encroaches on most economic sectors, ranging from the global multinational, such as Google's 90 percent share of general search in many countries globally to small, localised monopolies in market niches. This section looks at various sectors, providing pointers to our case studies that explore the role of monopoly power in different sectors, and some common monopolists' tricks.

Big Tech

The Big Tech firms, notably Microsoft, Apple, Amazon, Facebook/Meta, and Google, whose billionaire founders were once hailed as disruptors and garage inventors, are monopolies. Taken together, they comprise the largest concentration of corporate power the world has ever seen.

These very different firms share similar traits. They all position themselves as crucial or indispensable intermediaries at key chokepoints in our economies and societies, mediating immense numbers of interactions and accumulating data like never before. They are preoccupied with growth and “network effects” that lock users into their domains, then create “moats” around their businesses to ensure that competitors can’t encroach. They buy or eliminate any potential rivals through “killer acquisitions”[69] and keep whole ecosystems of businesses trapped in their intense gravitational economic fields.

As our case study on Big Tech explains, their monopoly power is now so entrenched that they can degrade quality and milk their users without worrying about losing market share. The rising influence of technology firms across the inner workings of our economies now makes them too big to fail, too big to trust and “too big to care.”

Big Pharma

The pharmaceutical industry has steadily grown more concentrated in recent decades. It is no coincidence that this rise in monopoly power, especially since the 1990s, has been accompanied by profound and harmful changes in the essential character and purpose of the industry, damaging the quest to discover and disseminate essential drugs. As monopolisation has progressed, a sector that had once prioritised cutting-edge research and development (R&D), cost-effective manufacturing, and innovation, has morphed into one that prioritises ‘patent farming’, which are legal strategies to obtain, defend and extend patents, alongside lobbying to push for patent-friendly laws.

Patents are particular forms of monopoly power, and are accompanied by ever stronger patent protections, which are enforced and enhanced by audacious international trade regimes. This has enabled price-gouging at a global scale, locking out citizens of lower-income countries, in particular, from benefits.

Dominant pharmaceutical firms now routinely return far more profit to their wealthy shareholders than they spend on R&D. As our case study explains, Big Pharma is bigger than ever, but not fit for purpose – and monopoly power is the central problem.

Big Retail, Big Luxury

Five of the top 20 richest people on the Forbes billionaire list owe their fortunes to retail. These are Bernard Arnault of LVMH, Françoise Bettencourt of L'Oréal, Amancio Ortega of Zara/Inditex, and Rob and Jim Walton of Walmart, the multinational retail corporation. Arnault was recently ranked the world's richest man, and described as "the most acquisitive dealmaker in the luxury business"[70]: that combination is no coincidence. The French billionaire now owns many of the world's most iconic luxury brands, including Dior, Bulgari, Givenchy, Tiffany & Co, Tag Heuer, and over 70 others. This combination gives his company, LVMH, immense buyer power that enables him to dominate and set terms for suppliers. Then, LVMH's monopolising patents and brands enable further pricing power.

But as our case study on Big Retail and Big Luxury shows, M&A and patent farming are just some of the tactics that retail giants use to build their power and profits, and to steamroller rivals. It also points to evidence and a lawsuit suggesting that Amazon, far from delivering lower retail prices as many people think, may well be delivering the exact opposite.

Big Energy

In the Forbes top 20 list of billionaires we find the energy mogul Charles Koch and his sister-in-law Julia Koch, ranked 18th and 19th richest in the world, with a combined fortune of nearly US$120 billion. Koch Industries, run by Charles, "expands, almost exclusively, into businesses that are uncompetitive, dominated by monopolistic firms, and deeply intertwined with government subsidies and regulation," wrote Chris Leonard, author of the definitive 2019 book, Kochland.

Koch is also America's best-known funder of "free market" think tanks and causes that promote monopolisation, attack government and taxes, oppose trade unions, and undermine the fight against climate change.[71] This is hardly a coincidence: monopoly power is exceptionally profitable, so monopolists can "invest" disproportionately more in lobbying and funding pet think tanks than firms in competitive markets can afford.

Our case study on Big Energy lays out how market power has always coursed through global energy markets, and how new mega-mergers that now loom on the horizon need to be stopped, for the sake of both climate justice and economic justice.

Food Giants

Cargill, the world's largest commodity trader, is the product of a business strategy based on amassing huge market power. The combined wealth of Cargill family billionaires on the Forbes rich list was recently estimated at US$43 billion[72] – and it is no coincidence that the company also enjoys significant concentrated economic power in our food systems.

> "We are the flour in your bread,
> the wheat in your noodles,
> the salt on your fries."
>
> Cargill company brochure

As our Food case study shows, alongside a small number of 'food giants,' Cargill sits astride the neck of a food hourglass, through which a major part of the world's food must pass, on its way from producers to consumers. The more concentrated the control becomes, the more profits can be extracted from the passing traffic: the greater the food poverty, the greater the profits.

During the COVID-19 pandemic, the combined profits of the dominant four "ABCD" commodity trading giants – Archer Daniels Midland, Bunge, Cargill and Louis Dreyfus – more than tripled, from US$4 billion to over US$13 billion. These firms, a UN report notes, hold "inordinate power over the world's food systems," and if this concentration is not tackled, "any policy effort to mitigate the short-term effects of food price spikes will be futile in the long term."[73] Furthermore, the "ABCD" of the food industry are able to leverage their position in order to raise prices in times of crisis, as demonstrated during and after the pandemic and Ukrainian war.[74]

Finance: monopoly's handmaiden

Finance plays a special role in the story of monopoly power. First, it is heavily monopolised in its own right, with the "too big to fail" banks leading the charge, and a range of more esoteric monopolies all across the sector. Second, finance tends to promote monopolisation in other sectors, such as by throwing cheap capital at monopolists and starving weaker competitors. The billionaire investor and financier Warren Buffett has championed this approach, making him the world's fifth richest man. Buffett invests only in companies with big pricing power and defensive moats around their private castles to keep competitors out.[75]

Next, as our Finance case study (pdf) explores, the Mergers & Acquisitions (M&A) departments of investment banks actively construct monopoly power via M&As: not just as passive facilitators but as pushers, in pursuit of billions in merger fees.[76] Private equity firms, meanwhile, access cheap debt to "roll up" and join together disparate companies in smaller or more localised market niches, pushing monopoly deeper into the fabric of our societies: funeral homes, care companies, widget makers and many more.

3. The system of monopoly: how billionaires came to dominate

The world's top billionaires and corporations have not built such extreme wealth due to super-human productivity and ingenuity, or lucky breaks and good fortune. Monopoly power is their secret ingredient. Today, the global economic system is dominated by a handful of corporations because of a system of monopoly that Global Justice Now calls 'monopoly capitalism'.[77]

This system works like the eponymous board game: the goal is to build market power, crush opponents, and prevent entries. Forgotten in the annals of history is the original concept for the game developed by its inventor, anti-monopolist feminist Lizzie Magie. She included anti-monopoly rules based on rewarding all when wealth is created. Her vision was for players to resolve the contradictions between opposing philosophies, and illustrate a progressive alternative.[78]

In the real world, by contrast, the monopolist philosophy has become dominant, resulting in extreme wealth and power for the few. Oxfam has said, "every billionaire is a policy failure",[79] rightly pinpointing failed ideology and influence of vested interests across tax, trade, and trade-related intellectual property (TRIPs) policies. Yet even if every billionaire went to live on Mars, the system of monopoly would continue to extract wealth upwards and consolidate corporate power[80] because it has become naturalised in economic and political life.

This is no accident. An interlocking 'system of monopoly' has been created to construct a discourse, a policy environment, and institutions that dominate political, economic and public life. In turn, this combination has de-fanged the antitrust and competition policy instruments that are supposed to shape markets in the public interest, and turned them into pro-monopoly vehicles.

3.1 The rise of the Consumer Welfare doctrine

Antitrust laws and competition policies, which ought to limit market power and dominance, have existed in many countries for decades, even centuries (e.g. US Sherman Anti-Trust Act, 1890). The interpretation and enforcement of anti-monopoly regulation has, however, been repurposed through the influence of the "Consumer Welfare" doctrine on antitrust and competition policy.

Consumer Welfare became a critical, but not very well known, component of a broader neoliberal ideological project, that assumes markets are self-correcting, that competitive markets reward efficiency and penalise inefficiency, and importantly, that governments should leave the market to direct economic outcomes.

The ideological godfather of Consumer Welfare was Robert Bork, who argued in his 1978 book The Antitrust Paradox[81] that regulators should not concern themselves with market power, the structure of markets, the public interest, the concerns of citizens, workers or of the environment. Instead, he argued, to narrow the focus to two areas: the internal efficiency of corporations, so as to maximise output, and the interests of consumers. What Bork knew was that this was a pro-monopoly case that supports big corporations, because they are assumed to be more efficient. The idea was that these 'efficiencies' would trickle down to consumers, principally via lower prices.

These arguments are based neither on empirical evidence, nor economic theory.[82] Indeed, it has been customary for economists to assume that monopolists tend to jack up prices – as our latest data on markups demonstrates. More broadly, a growing body of research has emerged to debunk these ideas[83], yet they continue to dominate policy and discourse. Consumer Welfare is the monopolist's charter and the antithesis of the so-called "free market" philosophy. It also reduces the concept of 'welfare' to prices and profits, rather than health, well-being, personal freedoms and futures. Still, it dominates policy priorities, institutions governing economies, and political discourse – with multiple ensuing harms.[84]

3.2 The global reach of the pro-monopoly agenda

This ideology has not only shaped domestic politics: it has also been dominant in influencing the rules of the global economy. Many global trade rules, for example, encourage and protect monopoly power through, say, the proliferation of investor protection mechanisms that weaken government powers vis-à-vis multinationals.

Intellectual property (IP) law, as our case study on Big Pharma explains, grants literal monopolies on companies over rights to use inventions, trademarks, and trade secrets. Since the World Trade Organisation's TRIPS agreement requires its members to adopt IP regimes similar to those in the richest countries, it in effect extends the "rights" of these monopoly powers widely across the world. These rules have severely constrained the ability of all countries to learn from advanced technologies and introduce competitive products onto the market. For example, such restrictions on early production of generic medicines has removed any competition to big pharmaceutical corporations for years or decades. Meanwhile, there's been an explosion of industry-registered patents originating from publicly funded research and innovation that channel vast returns to shareholders and investors, while robbing the public of knowledge that could help genuinely collaborative innovation.[85] Since TRIPS was signed, prices of many medicines have soared, rewarding Big Pharma's shareholders, while severely limiting access to medicines globally, and also draining health systems in high, middle and low income countries.[86]

It is a similar story with the digital chapters of trade agreements, and bilateral and multilateral trade and investment deals more generally. The EU is, for instance, attempting to rein in some of Big Tech's most pernicious practices through the Digital Services Act (DSA), the Digital Markets Act (DMA), and the Artificial Intelligence Act (AI Act). Yet Big Tech firms, and especially US-based corporations, are trying to circumvent these regulations via trade agreements that may permanently restrict governments' ability to regulate, and may lock in their "rights" to control our vastly valuable data.[87] Relatedly, the Open Markets Institute recently highlighted some of the pernicious threats from the control monopolists have over Artificial Intelligence, including the risk it will amplify today's most dangerous monopoly harms.[88]

Finance is another core element in the 'system of monopoly', and holds enormous economic, legal, political and even cultural power. As our case study on finance explains, finance is heavily monopolised in its own right and is also a major driver of monopoly power across other non-financial sectors. A related problem is "financialisation" – where real economy activities and institutions are increasingly dominated by extractive financial logics and power relationships, rather than producing and innovating. For example, multiple acquisitions by dominant companies in healthcare and children's social care has led to higher levels of debt, higher engagement with tax havens, and greater market power. Recent research by the Balanced Economy Project found that the largest UK children's care home companies were making excess profits of GBP£22,000 per child per year, [89] while a report by Public Services International (PSI) exposed some of the tricks that billionaires have used to extract wealth from underlying healthcare companies, with knock-on effects on all stakeholders.[90] Financialisation extracts wealth from customers, workers, suppliers, taxpayers and others, releasing a plethora of financial rewards for owners. Finance should serve society, but in many countries the power relationship increasingly runs in the other direction.[91]

3.3 The capture of institutions and democratic process

Much is written about neoliberalism, and its influence in shifting the balance of power in favour of transnational businesses. As the anthropologist David Graeber observed, "neoliberalism [is] a 30-year campaign against imagination,"[92] meaning that the model is so normalised in "democratic" institutions that it places the imagining of alternatives beyond limits.

Antitrust and competition policy, which ought to be taming excessive concentrations of corporate power, have instead been central, though often overlooked, vehicles for driving economic concentration and consolidating institutional power. Monopolist interests are also intimately and structurally intertwined with the project of European integration.[93] This inbuilt structural bias advances powerful vested interests, and by definition marginalises smaller and local businesses, labour, consumers, taxpayers, governments, and civil society, excluding them from meaningful, inclusive and deliberative democratic processes.[94]

The system and policies that foster excessive economic concentration have had relatively limited public debate or scrutiny, leading to policy-making being easily influenced by the strong and expert lobbying capacity of business interests, beyond the public gaze. An elite, technocratic 'competition establishment' has evolved since the 1980s that has in effect protected the pro-monopoly approach. This has led to regulators, law firms, consultancies, banks, multinationals, academics, economists, lobbyists and assorted expert pundits discreetly constructing a set of institutions and legal norms to fortify these ideas.[95]

Monopolists' lobbying power continues to grow in capacity and influence. Our new research reveals the extent of lobbying muscle from our top 20 biggest companies, as, for example, Big Tech firms have responded sharply to EU and US initiatives to rein in surveillance advertising, user manipulation and other problems.

According to our research based on latest available data, the world's top 20 corporations spend more than €155 million on lobbying annually to influence political institutions in the US and the EU. They rely on a lobby network of 236 organisations, confederations, business associations and think tanks in Europe.[96] Of this, they spent €118.3 million in the US and €36.9 million in the EU. Big Tech is by far the biggest spender on lobbying among the world's top 20 corporations, making up 82 percent of the total (€30.3 million) in the EU, and 58% (€61.1 million) in the US.

These numbers underestimate the scale of spending on political influence by the world's 20 biggest corporations. There is no information available on Saudi Aramco, presumably because lobbying takes place via the Saudi state, while information on Berkshire Hathaway, United Health, Walmart or ExxonMobil for the EU is unavailable, as they don't have direct advocacy operations in Europe. Yet there are other avenues for influence: ExxonMobil, for example, lobbies primarily via industry associations.[97] Moreover, the structural power of monopolies adds to their political influence, as they can exert a lot of pressure on politicians due to their position in the economy and society, even without direct advocacy work.

Of the world's top 20 corporations, at least 14 are partners of the World Economic Forum (WEF), meaning they sponsor the event and are involved in shaping the debates at the annual meeting in Davos, which in turn can have wider ramifications for society. [98]

WEF partners	
Apple, Microsoft Alphabet/Google Amazon, Meta/Facebook Eli Lilly Visa Novo Nordisk Walmart	ExxonMobil JP Morgan Chase Johnson and Johnson LVMH Moët Hennessy Louis Vuitton Saudi Basic Industries

Competition regulators face near constant pressure from vested interests, usually with minimal public support because of the low visibility of their work. For example, the UK's Competition and Markets Authority was forced to speak out against Microsoft's lobbying tactics to steamroller through its proposed merger with Activision.[99] Competition authorities' efforts are made more challenging still by the fact that if they want to block a harmful merger, the onus is on them to prove to a high standard of evidence that it will be harmful, rather than the merging parties having to prove the potential benefits.[100] Tommaso Valletti, chief competition economist for the European Commission from 2016-2019, described one component of this problem: “I saw the consultants hijack a certain way of doing economic work. They do this on a massive scale, to create doubt. They bombard you. They say ‘well, this merger could bring all these fantastic efficiencies.’ You know that in practice this will not play a role, but then you have the burden of proof as an authority to dismiss those claims.”[101]

> “It is a very dirty game.”
>
> Tommaso Valletti, chief competition economist for the European Commission, 2016-2019

Consultancies have also been accused of “spamming the regulator” to try and gum up systems designed to act as a check against excessive concentrations of power.[102] US Attorney and academic Zephyr Teachout characterises monopolists’ capture and manipulation of the system as “Aristotelian corruption”, (or "the abuse of entrusted power for private gain," as Transparency International puts it in their definition of corruption). “They regulate, they tax, they extract,” Teachout continues They fund foundations, they fund lobbyists, they embed themselves in enforcement agencies and build moats around their power, using predatory pricing and killer acquisitions to prevent any serious competitors from taking over their political power, just as other political actors do.” [103]

> “Anti-monopoly is one of the most important anti-corruption tools that is underused and under recognized.”
>
> US Attorney and academic, Zephyr Teachout

In the real world game of monopoly, the dice are weighted in favour of the monopolists. Governments have allowed this to happen by choosing to prioritise private and vested interests above those of society at large. Decision-makers have failed to enforce policies that prevent the rise of billionaire monopolists, and which could distribute economic and political power to reward all when value is created.

Change is necessary – and possible.

4. The tide is starting to turn

There are early signs of an awakening to the harms of monopoly power, and resistance to the advance of the monopolists. Just as trickle-down economics has manifestly failed to redistribute wealth to the rest of society, the Consumer Welfare standard has been more about corporate welfare than people's welfare. The pro-monopoly ideology is a theoretical house of cards, ripe for collapse under its own inconsistencies.

History provides numerous episodes of robust antitrust action in response to the need to suppress the rise of monopoly power. The breakup of the giant "money trusts" and against the giant Standard Oil in the United States just over a century ago, for example, successfully combated concentrations of political and economic power threatening the democratic state.[104] Actions against Microsoft in 2001 unleashed a wide range of benefits including vastly lower prices, and a "burst of innovation."[105] Most recently, Google lost an antitrust court battle with Fortnite maker, Epic Games Inc. This could lead to a shake-up of the mobile app economy, and cost the technology giant billions of dollars in revenue.[106]

Different groups in the US representing businesses, workers, farmers, consumers and other civil society groups whose interests are harmed, have over the last decade coalesced around a remarkably successful anti-monopoly movement, which has transformed the public conversation there.[107] Activists have been challenging excessive and harmful corporate power for decades. Increasingly, however, groups are recognising that using powerful anti-monopoly rules can tackle the root cause of excessive corporate power.[108] People vs Big Tech, an open network of civil society organisations and concerned citizens, is just one example of the response to the rise of the power and abuses of Big Tech.[109]

Antitrust and competition authorities are also beginning to take more robust action. The US Federal Trade Commission (FTC), chaired by Lina Khan, is leading an explosion of regulatory activism, with US antitrust enforcers taking on the Big Tech leaders like Google, Amazon, Facebook, Apple and Microsoft, including attempts to break up some of them.[110] In 2021, the UK's Competition and Markets Authority (CMA) ordered Meta/Facebook sell off a small and recently-acquired fragment of Meta called Giphy. It was the first time any regulator, anywhere in the world, had blocked, let alone broken up, a big tech firm.[111]

The EU has also taken robust action against some of Google's practices in the EU market. For example, in June 2023 it took a preliminary view that Google should be partially broken up, after accusing it of monopolising the advertising technology that matches online advertisers with publishers, then turning it into a choke point allowing it to extract massive fees. The EU has also begun rolling out its landmark Digital Markets Act (DMA) that aims to strengthen the European Commission's ability to tackle unfair and anti-competitive behaviour by Big Tech platforms, so that digital technology benefits European consumers and citizens while creating opportunities for European startups and SMEs. As with any legislation, the DMA's success depends on how effectively it is enforced.[112]

In South Africa, competition law contains some of the most progressive ideas of all. It actively seeks to create greater economic participation, particularly for 'historically disadvantaged persons' as part of its public interest considerations in merger decisions.[113] However, these positive steps are hampered where there are high levels of corporate concentration and barriers of entry to markets. Enforcement has been difficult in light of powerful forces opposing change, which is no small concern in a country facing extreme levels of racialised concentration.[114]

Most authorities and governments already have well established legal frameworks that can bring about transformational change, even if some need updating for the modern digital era. Governments negotiating bilateral economic agreements can also desist from imposing investor protector mechanisms on governments, and recognise their right to regulate the entry of foreign investors, or adopt flexible intellectual property legislation to ensure the primacy of public health, agricultural livelihoods, and protect traditional knowledge and biodiversity.

Sometimes monopolies are inevitable or even desirable, and can work in the public interest providing essentials we all need to live a good life. For example, public utility providers of clean water, energy supply, or telecoms, can be considered "natural monopolies": it would seem sensible to have single rather than multiple competing national or regional rail networks, or water supply networks. These may be best left as monopolies, but democratically owned and/or controlled by the public.[115]

5. Ways to end the billionaire takeover for the public good

The shift of power away from citizens and governments into the hands of monopolists is stripping us of our ability to make democratic decisions and restructure our economies in ways that meet the public interest, around the world.

In this paper, we have identified how the world's biggest companies and their billionaire owners keep prices on goods and services higher than is reasonable, dominate and shape economic sectors to serve their own interests, manipulate our behaviour and even our thoughts, and hold disproportionate, corrupting sway over policy-making and government decisions.

It is well within the reach of governments around the world to reclaim, break, and redistribute monopoly power for the benefit of society and future generations.

Change can start now. Below is not a manifesto for dealing with monopolies, but starting points for decision-makers:

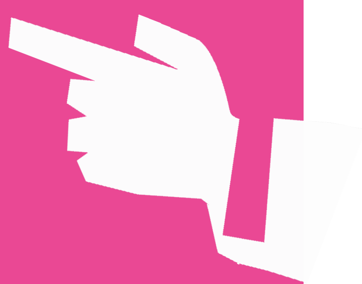
- Break open dominant firms and harmful monopoly power using robust anti-monopoly rules and enforcement, including breaking dominant firms up, opening up their walled gardens, which lock users into their ecosystems, and stopping excess concentrations of corporate power with tighter merger controls (starting with a change to the rule that regulators provide evidence to block a merger, rather than dominant firms providing the evidence justifying why a proposed merger benefits society).
- Treat a dominant firm that provides a public good or essential service, and where breaking it up will cause more harm than good, as a public utility:

bring it into public ownership or control, and/or subject it to public interest regulations and obligations, especially non-discrimination rules, and including alternative IP systems, conditions on public funding, and public procurement conditions.

- Transform global treaties and institutions to support efforts to curb excess concentrations of corporate power and associated harms (starting with the move from treaties which promote efficiency at all costs to rules that build secure economies). Rethinking the fundamental principles of trade and investment deals including investor protection chapters (abolishing investor state dispute settlement mechanisms), intellectual property rules, digital trade chapters is urgently needed.
- Clamp down on corporate monopolies' access and disproportionate lobbying influence on policy-making, including by strengthening conflict of interest rules, and by enhancing transparent and democratic access to our political institutions increasing opportunities for citizens to redress harms of excessive corporate power.

The time to put the public voice and interest at the forefront of creating a better future is long overdue.

Climate change, food security, and the digital transition cannot be left to the market alone – they require greater democratic participation and the creation of a new, fairer, and more equal economy.



Endnotes

1. Authors' calculations based on Worldscope / Refinitiv data. The list of top 20, top 100 and bottom 50% of firms was calculated separately for each year, and ranking was according to market capitalisation. The total number of firms in our sample in 2022 was 33,953 (the number was different in different years). The total population of firms in the relevant database was approx. three times larger, but we excluded many firms because they did not have a recorded market capitalisation.
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46. Competition and Labour: A Trade Union Reading of EU Competition Policies https://www.etuc.org/sites/default/files/press-release/file/2023-05/Competition%20and%20Labour%20-%20ETUC%20study%20May%202023.pdf

47. According to a 2020 study by Autor et al., the falling labour share is in a sense the flip side of rising market power by dominant or "superstar" firms. See Autor, D., Dorn, D., Katz, L. F., Patterson, C., and Van Reenen, J. (2020), 'The Fall of the Labour Share and the Rise of Superstar Firms', Quarterly Journal of Economics, 135(2), 645–709.

48. On the trillions in GDP and worker losses, see The Profit Paradox : How Thriving Firms Threaten the Future of Work, Jan Eeckhout, Princeton University Press, 2021, and the interview with Eeckhout in Europe's monopoly Problem . . . and the missing trillions, The Counterbalance, Jun 22, 2021. He notes that while highly profitable dominant firms (like global investment banks) often pay their workers well, it is the economy-wide effects of market power that are so devastating for workers. An important piece of his research, outlined in the interview, conflicts with the findings of Thomas Philippon, who had argued that antitrust enforcement is stronger in Europe than in the United States, and as a result markups were less pronounced in Europe. Eeckhout found that that part of Philippon's results were due to timing effects amid the "shock" of China entering world markets; a database with greater coverage over time showed that markups had risen similarly in Europe.

49. On tax havens, the estimate is US$480 billion in annual losses: see State of Tax Justice 2023, Tax Justice Network, July 25, 2023.

50. Eeckout ibid.: he says in the interview: "What we call antitrust at the moment is anything that helps address issues of market power – whether the dominance is due to technological change, or due to M&A. I completely agree that antitrust policy is the solution, using a broad definition of antitrust. We have to deploy antitrust that addresses not just M&A but also the consequences of fast technological change. I believe there is a consensus about this, even if there is no consensus about how to do it."

51. OECD (2021), OECD SME and Entrepreneurship Outlook 2021, OECD Publishing, Paris, https://doi.org/10.1787/97a5bbfe-en

52. The global food crisis: ABCD of food – how the multinationals dominate trade, The Guardian, Jun 2, 2011.

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54. 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, Innovation in Large and Small Firms: An Empirical Analysis. Also see Non-price effects of mergers and acquisitions Justus Haucap, Joel Stiebale, DICE Discussion Paper, No. 402, ISBN 978-3-86304-401-5, Heinrich Heine University Düsseldorf, Düsseldorf Institute

for Competition Economics (DICE). It says : "the vast majority of ex-post evaluations of horizontal M&As finds large negative effects on innovation inputs and outputs."

55.Kenner, D., 2019. *Carbon inequality: The role of the richest in climate change*. Routledge.

56. Greenpeace report: Davos financial players pump US$1.4 trillion into fossil fuels, Greenpeace International 21 Jan 2020 and Banking on Climate Change – Fossil Fuel Finance Report Card 2019, Banktrack, March 20, 2019

57. A billionaire emits a million times more greenhouse gases than the average person, Oxfam, Nov 7th, 2022.

58.https://www.weforum.org/agenda/2020/01/financing-fossil-fuels-repeat-2008-crash-heres-why/

59. US Taxpayers Should Not Be Subsidizing Harmful Big Oil Mergers, Niko Lusiani, Promarket, Nov 20, 2023. 2023

60. Chevron announces agreement to acquire Hess, Oct 23, 2023.

61. A sustainable future: how can control of monopoly power play a part? Simon Holmes, Michelle Meagher, European Competition Law, 2022.

62. Tackling monopoly power and the climate crisis – together, The Counterbalance, Jul 18, 2022, and A sustainable future: how can control of monopoly power play a part? Simon Holmes, Michelle Meagher, European Competition Law, 2022.

63. For example, in January 2023 the US Department of Justice sued Google for monopolising digital advertising technologies, and pocketing more than 30 percent of advertising dollars that flow through its dominant platforms, sucking revenue away from publishers and media organisations thus undermining a cornerstone of democracy. This is a worldwide phenomenon, not only involving Google. Justice Department Sues Google for Monopolizing Digital Advertising Technologies, US Department of Justice, Jan 24, 2023. The landmark "Cicilline Report" said for example, that "Through dominating both digital advertising and key communication platforms, Google and Facebook have outsized power over the distribution and monetization of trustworthy sources of news online, creating an uneven playing field in which news publishers are beholden to their decisions." See Investigation of Competition in Digital Markets, US Subcommittee on Antitrust, Commercial and Administrative Law, 2020.

64. The first big 'social media' platform was MySpace, which became notorious for poor privacy and toxic content. Facebook initially won market share by presenting itself as a privacy-centric alternative, promising not to track users. But once it had killed MySpace and dominated social media, it changed tack, forcing users into a devil's bargain where they had to accept strict privacy conditions and toxic algorithms if they wanted to connect with friends. See The Antitrust Case Against Facebook, Berkeley Business Law Journal Vol. 16, Issue 1, Revised 19 Jan 2021, Dina Srinivasan, Sept 10, 2018. For example, back then Facebook promised that "We do not and will not use cookies to collect private information from any user."

65. See e.g. The Big Tech Extortion Racket: How Google, Amazon and Facebook control our lives, Barry Lynn, Harper's Magazine, Sept 2020.

66. The Trouble with Facebook A Conversation with Roger McNamee, Sam Harris show, Episode 152, March 27, 2019

67. For example, see The Big Tech Extortion Racket: How Google, Amazon and Facebook control our lives, Barry Lynn, Harper's Magazine, Sept 2020.
68. Cory Doctorow covers this monopoly life cycle in his book Chokepoint Capitalism. Lina Khan, Chair of the US Federal Trade Commission, said: "In the early years the firms are chasing growth and share and so they'll actually compete to make their products good for people. But we've seen how in digital markets once the market tips and the firms start to enjoy monopoly power and are able to start protecting that power, we see that they start becoming too big to care, in a basic way. Where they can kind of make their product worse, they can make it more expensive . . . . at the end stage of this monopoly cycle these firms are just in extraction mode. . . actively degrading their services in ways that they recognise in making the product worse." (Bloomberg TV, Nov 3, 2023.)
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73. UN Trade and Development Report, 2023, Chapter 3, UNCTAD, Figure III.4 p83 and p78.
74.https://abcnews.go.com/International/1-year-war-ukraine-affecting-food-supplies-prices/story?id=97320422
75. Special Investigation: The Dirty Secret Behind Warren Buffett's Billions, David Dayen, The Nation, Mar 12, 2018.
76. How Finance Drives Monopoly Power Part 3: The finance-monopoly freight train,The Counterbalance, Dec 16, 2022
77. Monopoly capitalism: What is it and how do we fight it? Global Justice Now, Mar 2023
78. The secret history of Monopoly: the capitalist board game's leftwing origins, Mary Pilon, The Guardian, April 11, 2015
79. Survival of the Richest How we must tax the super-rich now to fight inequality, Oxfam, Jan 2023
80. Neoliberalism as corporate power, Terry Hathaway, 2020, Competition and change
81. The *Antitrust Paradox*: A Policy at War with Itself, *Robert* H. *Bork*. New York: Basic Books, 1978.
82. See Competition is Killing Us, Michelle Meagher, Penguin Random House, 2020, especially pg 79-83.
83. Most of the research in this area focuses on the United States. Publications with a global or European focus include:
i) Competition is Killing Us, Michelle Meagher, Penguin Random House, 2020;
ii) The Scott Morton affair: anatomy of a democratic victory, The Counterbalance, Jul 26, 2023; the Counterbalance is the in-house newsletter of the Balanced Economy Project;
iii) "Consumer Welfare Is Dead": What Do We Do Instead?—A Perspective from Europe,

Cristina Caffarra, ProMarket, April 27, 2023;
iv) The Profit Paradox, Jan Eeckhout, Princeton University Press, 2021.
v) Inequality Inc., Oxfam, Jan 15, 2024.
84. See Harms from Concentrated Industries: A Primer, Denise Hearn, Columbia Center on Sustainable Investment (forthcoming, 2024)
85. See *Pharmanomics*: *How Big Pharma Destroys Global Health*, Nick Dearden, 2023. Verso Books.
86. See The quadruple tax system of patent monopolies, Nicholas Shaxson, Balanced Economy Project / Global Justice Now, Jul 5, 2022
87. EU Digital Trade Rules: Undermining Efforts to Rein in Big Tech, Left.EU, March 2023
88. AI in the Public Interest: Confronting the Monopoly Threat, Open Markets Institute, Nov 2023.
89. Report: Large firms making excessive profits in children's social care; CMA ducks the challenge, Balanced Economy Project, March 2022.
90. See, for example, Care Givers and Takers - How finance extracts wealth from the care sector, Nicholas Shaxson, Public Services International (PSI), May 10, 2022; or Report: Large firms making excessive profits in children's social care; CMA ducks the challenge, Balanced Economy Project, March 2022.
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92. David Graeber on a Fair Future Economy https://www.youtube.com/watch?v=7YynqVvgZYI
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94. Ibid.
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