

# 100 Years of Rising Corporate Concentration

Based on BFI Working Paper No. 2023-20, “100 Years of Rising Corporate Concentration,” by Spencer Y. Kwon, Harvard; Yueran Ma, Chicago Booth; and Kaspar Zimmermann, Leibniz Institute

*US corporate concentration has increased persistently over the past century, with the manufacturing and mining sectors consolidating at a faster pace prior to the 1970s, and with the services, retail, and wholesale sectors taking the lead since. These long-run trends appear in line with stronger economies of scale.*

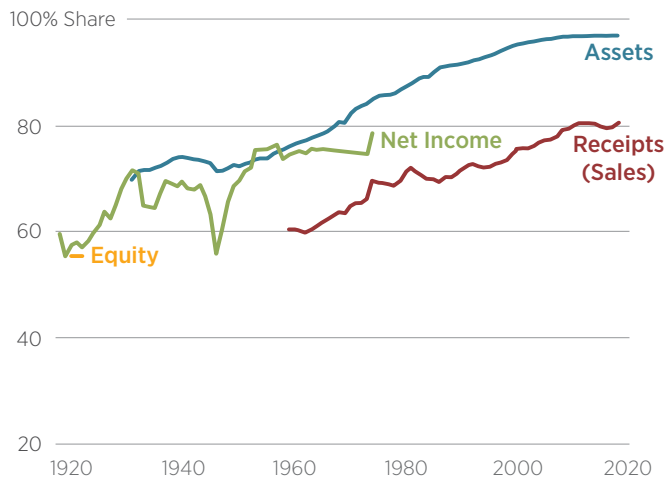
One persistent question in economics over the last 150 years is whether rising production concentration is somehow inevitable in modern industrial development. Since the 19th century and including Marx, continuing through Alfred Marshall near the dawn of the 20th, and onward to the present, many have wondered whether increasing concentration is mere coincidence or, perhaps, an economic law. Lenin certainly

believed that concentration was inexorable, confidently stating in 1916: “[T]he enormous growth of industry and the remarkably rapid concentration of production ... are one of the most characteristic features of capitalism.”

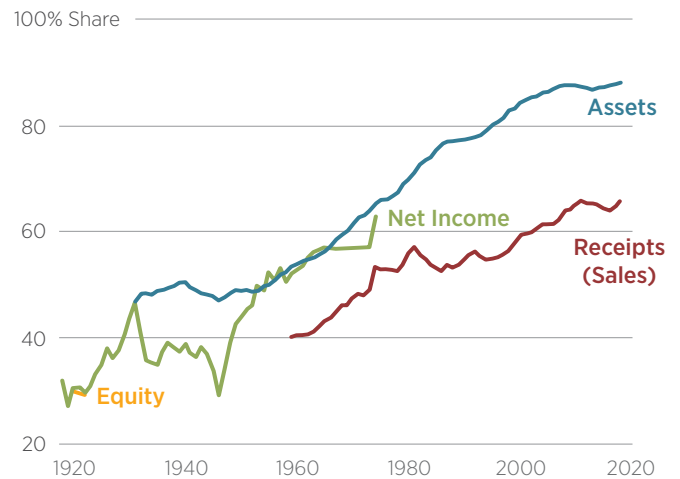
What happened in the century following Lenin’s assertion? This research examines this question by studying the evolution of production

Figure 1 • Shares of Top 1% and 0.1% Corporations

## A) Top 1%



## B) Top 0.1%



Note: This figure shows the shares of the top 1% (left panel) and the top 0.1% (right panel) corporations. The blue line shows the share of assets accounted for by top businesses sorted on assets. The red line shows the share of receipts (sales) accounted for by top businesses sorted on receipts. The green line shows the share of net income accounted for by top businesses sorted on net income (restricting to those with positive net income). The yellow line shows the share of equity capital accounted for by top businesses sorted on equity. See working paper for more details.

concentration in the US economy from 1918 to 2018. The authors develop a rich database by digitizing data on US corporations from the historical publications of the Statistics of Income (SOI) and the associated Corporation Source Book from the Internal Revenue Service (IRS). Since 1918, the SOI has been reporting annual statistics of the population of corporations by size bins, including the number of businesses and their financial information (e.g., assets, sales, net income,). Please see the working paper for more details on methodology. The authors use these size bins to estimate top businesses' shares in the aggregate, in main sectors, and in subsectors, to find the following:

- Since the early 1930s, the asset shares of the top 1% and top 0.1% corporations have increased by 27 percentage points (from 70% to 97%) and 40 percentage points (from 47% to 88%), respectively.
- At the industry level, the authors note a general rise in corporate concentration among the main sectors and the subsectors, but the timing differs across industries. For manufacturing and mining, rising concentration was stronger in earlier decades (before the 1970s); for services, retail, and wholesale, rising concentration was stronger in later decades (after the 1970s).
- These results hold when the authors examine the relative concentration within the largest businesses (e.g., the top 1% relative to the top 10%), when they include noncorporations (partnerships and sole proprietorships) in years with available data, as well as when they review a fixed number of businesses (e.g., top 500 or 5,000).

The authors acknowledge that it is challenging to determine the precise cause of this persistent increase in corporate concentration, but they offer insights into the leading hypotheses, including the following:

### **ECONOMIES OF SCALE**

In line with previous research that has shown how industrial technologies have spurred concentration trends among US corporations<sup>1</sup>, they find that:

- The timing and the degree of rising concentration in an industry align closely with rising technological intensity, for example, the top 1% share in an industry

comoves strongly with the investment intensity of R&D and IT. Also, patent data reveal that influential technologies are associated with more production concentration (whereas the total number of patents, per se, does not play a role).

- The degree of concentration is positively correlated with a measure of the intensity of fixed operating costs. In other words, to the degree that higher fixed costs favor production at scale, large firms have an advantage.
- Over the medium term, industries that experience higher increases in concentration also experience higher growth in real gross output, and their output shares in the economy expand.

### **TRADE AND GLOBALIZATION**

International trade is not sufficient to explain industrial concentration trends over the last 100 years:

- For the United States, trade did not expand in the first half of the 20th century when manufacturing concentration was on the rise.
- Also, globalization only accelerated around the 1970s, when the rise in services concentration took hold; however, the volume of international trade in services is relatively small.

### **REGULATION**

On the question of whether, and to what degree, regulation has influenced corporate concentration, the authors find that:

- The data do not reveal a significant relationship between corporate concentration and standard aggregate antitrust enforcement measures, such as the number of antitrust cases filed by the Department of Justice (DOJ) or the budget of the DOJ's antitrust division.
- That said, antitrust regulation could have a more pronounced impact on a particular market.
- In sum, the authors do not find that regulations have shifted in favor of large firms over the past century; moreover, they find no evidence that regulations particularly favored manufacturing over services in earlier decades, and then switched focus post-1970.

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<sup>1</sup> See "The Industrial Revolution in Services," forthcoming from Journal of Political Economy, by UChicago economists Chang-Tai Hsieh and Esteban Rossi-Hansberg, for additional insights into methodology and findings related to US industrial concentration over the last 50 years; available as a [BFI Working Paper](#), [Research Brief](#), and [Economic Finding](#).

**Bottom line:** Long-run trends of US corporate concentration are likely explained by economies of scale. As to whether such concentration is “good” or “bad,” the welfare implications can be nuanced. For example, even if large firms emerge from economies of scale over time (that is, from seemingly “good” or at least “neutral” causes), their size may ultimately allow firms to wield power that unduly benefits them at the cost of, say, social wellbeing (an arguably “bad” outcome).

On the intriguing question of whether corporate concentration will persist into the future, the authors suggest that—historical evidence notwithstanding—the answer is not obvious.

At the turn of the 20th century, the inevitability of technological changes leading to increasingly larger enterprises and higher production concentration was a central doctrine of communism, with Lenin asserting that economies of scale due to “modern technology” would be so strong that the Soviet Union could be run by one giant firm to enhance efficiency. Though extreme, this view inspired the work of Ronald Coase on the boundaries of the firm, and influenced the direction of a number of prominent intellectual traditions. Some maintain that large enterprises will become all powerful and change the way society is organized, whereas others caution that large organizations face certain limitations. Which direction will we go? More analyses about the nature of the firm and the foundations for the organization of production may provide knowledge that can guide our outlook.

For more on the history of thought about the organization of production and the organization of society, please see Yueran Ma’s video presentation “[Communism and the Chicago School](#).”

#### READ THE WORKING PAPER

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#### ABOUT OUR SCHOLAR



#### **Yueran Ma**

*Associate Professor of Finance and Kathryn and Grant Swick Faculty Scholar, Chicago Booth*

[chicagobooth.edu/faculty/directory/m/yueran-ma](https://chicagobooth.edu/faculty/directory/m/yueran-ma)

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