



POLITICAL ECONOMY
RESEARCH INSTITUTE

The Scale and Policy Implications of Nonfinancial Business Rents

Marc Jarsulic

August 2025

WORKINGPAPER SERIES

Number 631

The scale and policy implications of nonfinancial business rents

Marc Jarsulic¹

- **Introduction**

The behavior of monopolies has been in the news. A federal judge, for example, recently decided that Google’s monopolistic behavior with respect to its search engine violated antitrust law.² The Department of Justice has proposed a range of behavioral and structural remedies -- including forbidding Google to pay third parties to make the Google search engine the default on their devices, and requiring that Google divest the Chrome internet browser.³ The FTC has brought actions against other large businesses, challenging what they allege are illegal attempts to create or enhance monopoly power.⁴ It remains to be seen whether current DOJ and FTC leadership will follow through on these efforts.

Regardless of how these individual legal actions play out, there is abundant evidence that barriers to competition and the market power of firms have increased over time. For example: firm markups—the ratio of price to the marginal cost of production—have risen substantially since the 1980s;⁵ the rate of entry of new firms across the economy has been declining since the late 1970s;⁶ and overall market concentration has increased over the past several decades.⁷

¹ The author thanks Prof. Mark Glick for helpful comments. The author is solely responsible for the contents of this paper.

² United States, et al. v. Google, LLC, No. 20-cv-3010 (APM) (D.D.C. Aug. 5, 2024), Dkt. No. 1033, available at <https://www.texasattorneygeneral.gov/sites/default/files/images/press/Google%20Search%20Engine%20Monopoly%20Ruling.pdf>

³ United States, et al. v. Google, LLC, No. 20-cv-3010 (APM) (D.D.C. Nov. 20, 2024), Dkt. No. 1052, available at <https://www.courthousenews.com/wp-content/uploads/2024/11/doj-google-final-remedy-proposal-chrome-break-up.pdf><https://storage.courtlistener.com/recap/gov.uscourts.dcd.223205/gov.uscourts.dcd.223205.1052.0.pdf>

⁴ For example, the FTC has sued [Facebook](#) and [Amazon](#), alleging anticompetitive conduct, *see* <https://www.ftc.gov/legal-library/browse/cases-proceedings/191-0134-facebook-inc-ftc-v>, and <https://www.ftc.gov/legal-library/browse/cases-proceedings/1910129-1910130-amazoncom-inc-amazon-e-commerce>.

⁵ International Monetary Fund, “World Economic Outlook, Challenges to Steady Growth”, October, September 24, 2018, available at <https://www.imf.org/en/Publications/WEO/Issues/2018/09/24/world-economic-outlook-october-2018>; Jan De Loecker and Jan Eeckhout, “The Rise of Market Power and the Macroeconomic Implications”, NBER working paper No. 23687, August, 2017, available at <https://www.nber.org/papers/w23687>; Robert E. Hall, “New Evidence on the Markup of Prices over Marginal Costs and the Role of Mega-Firms in the US Economy”, NBER working paper No. 24574, May, 2018, available at <https://www.nber.org/papers/w24574>.

⁶ Since 1980, new firm entry has steadily declined by nearly half. Firm exit rates have also slowed, albeit less intensively, and today’s firms are on average older. *See* Ian Hathaway and Robert E. Litan, “What’s Driving the Decline in the Firm Formation Rate? A Partial Explanation”, The Brookings Institution, November 20, 2014, available at <https://www.brookings.edu/research/whats-driving-the-decline-in-the-firm-formation-rate-a-partial-explanation/>; Ryan A. Decker et al., “Declining business dynamism: Implications for productivity?”, The Brookings Institution, September 19, 2016, available at <https://www.brookings.edu/research/declining-business-dynamism-implications-for-productivity/>.

⁷ *See* Gustavo Grullon, Yelena Larkin, and Roni Michaely, “Are U.S. Industries Becoming More Concentrated?”, *Review of Finance*, Volume 23, No. 4, July 2019, pp. 697–743, available at <https://doi.org/10.1093/rof/rfz007>; David Autor et al., “Concentrating on the Fall of the Labor Share”, *American Economic Review*, Vol. 107, No. 5, May, 2017, pp.180-185, available at <https://www.aeaweb.org/articles?id=10.1257/aer.p20171102>; Kathleen M. Kahle and Rene. M. Stulz, “Is the US Public Corporation in Trouble?”, *Journal of Economic Perspectives*, Vol. 31, No. 3, Summer 2017, pp. 67-88.

Since market power allows firms to earn rents – i.e. supra-competitive profits – an empirical measure of aggregate rent can serve as an informative measure of market power. Moreover, if rents are large enough, they have implications the distribution of income.

In what follows, we estimate rent as a share of gross value added for the nonfinancial business sector (NFB), and for the nonfinancial corporate sector (NFC), using distinct estimation techniques.⁸

The results are remarkably similar, and large enough to indicate that rent extraction is an important mechanism by which the income distribution has been skewed upward. They also point to an important policy option: a tax on rents to support important social programs such as Medicare/Medicaid, which will also reduce the economic and political power of the largest monopolies.

- **Using financial market values to estimate the rental share of nonfinancial corporate gross value added**

In a competitive financial market, the value of a firm will be equal to the present value of its net revenues. If the market value exceeds the replacement cost of a firm’s capital, there is an obvious way for a new entrant to make money: A new entrant would gain from purchasing an additional unit of capital and using it to produce the same good as the incumbent firm. This is because the new entrant would earn an immediate financial reward—the difference between the market value and replacement cost.

To put it another way, entry is encouraged by the existence of an arbitrage opportunity. Arbitrage opportunities exist when it is possible to buy a good in one market—in this case, the market for capital goods—and sell it for a higher price in another market. The arbitrage is between the capital goods market and the equity and debt markets—or buying a unit of capital goods at its current replacement cost and reselling it for more in the equity and debt markets by putting it to work in the appropriate line of business.

Of course, entry will increase the supply of goods. This should reduce the price of the firm’s output and therefore also reduce the net revenue from every unit of capital used in that line of business. This phenomenon makes entry a self-limiting process. Entry will continue until net revenue per unit falls to the level of replacement cost per unit of capital. At this point the arbitrage opportunity is gone and incumbent firms earn the competitive rate of return capital.

Thus, when there are no barriers to entry, the market value of a firm, V , will be equal to the replacement cost of its capital, RC .

⁸ Earlier estimates of the rents using different models and time periods can be found in Marc Jarsulic, “Antitrust Enforcement for the 21st Century”, *The Antitrust Bulletin*, Volume 64, No. 4, 2019, pp. 514-530, available at <https://doi.org/10.1177/0003603X19877008>; ; Simcha Barkai, “Declining Labor and Capital Shares”, *The Journal of Finance*, April 26, 2020, pp. 2421-2463, available at <https://onlinelibrary.wiley.com/doi/10.1111/jofi.12909>; and Has van Vlokhoven, “Estimating the cost of capital and the profit share”, *The Economic Journal*, Volume 134, Issue 661, July, 2024, pp. 2175-2206.

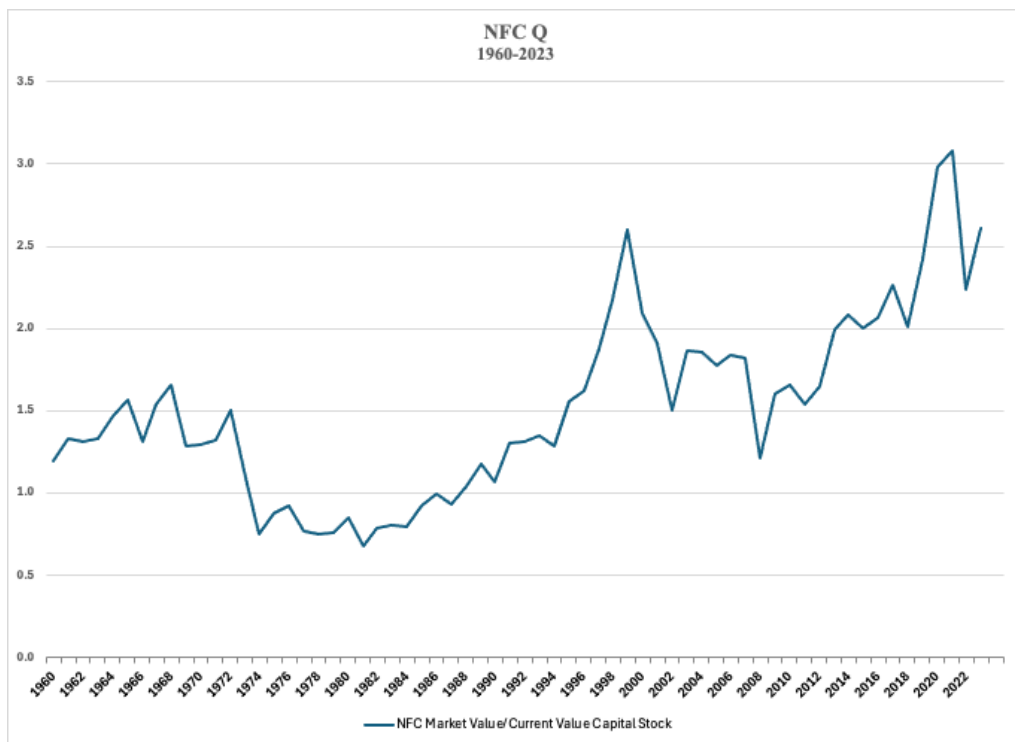
However, entry barriers can make it possible for a firm to earn more than the competitive rate of return on its capital. The existence of such barriers means that the ability of new firms to increase supply can be imperfect, and the return to capital for an incumbent firm can remain above the competitive level. When its rate of return exceeds the competitive level, a firm is said to be earning an economic rent.

When a firm’s net earnings include rent, those supranormal revenues will be included in the stock market valuation of the firm. After all, market participants do not care about the source of net revenues—only that they exist. This suggests a way to use financial market valuations and the replacement cost of capital stock to construct a measure that can signal when a firm is earning rent.

When there are no entry barriers, the market value of the firm will equal the replacement cost of its capital stock: $V = RC$. When $Q = V/RC$ is greater than 1, the firm is earning returns that exceed competitive levels.⁹

The value of aggregate Q for the nonfinancial corporations (NFC) has changed strikingly over time, increasing from an average of 1.4 in the 1960’s to 2.6 in 2023 (see Figure 1). This indicates a meaningful rise in rents.

Figure 1



⁹ For a discussion of the relationship among Q, competitive profits, and economic rent, see Eric B. Lindenberg and Stephen A. Ross, “Tobin’s Q Ratio and Industrial Organization,” *The Journal of Business* 54 (1) (1981): 1–32, available at https://www.researchgate.net/publication/24102787_Tobin's_Q_Ratio_and_Industrial_Organization, and Stephen A. Marglin, *Growth, Distribution and Prices*, Cambridge, MA: Harvard University Press, 1984, Chapter 14.

The numerator of this ratio, the market value of nonfinancial corporations, is the sum of their debt and equity. Equity and debt values are from Financial Accounts data.¹⁰ Equity values for corporations that are not publicly traded are imputed in the Financial Accounts, using IRS data. Total imputed equity is approximately fifteen percent of total.¹¹

The denominator is Bureau of Economic Analysis fixed capital stock at current cost.¹² It includes the value of intellectual property products – defined to include research and development, entertainment originals and other artistic originals, and software.¹³ Although measures of these intangibles are necessarily imperfect, they do account for the changing nature of the capital used in modern production.

Firm-level data for publicly traded-nonfinancial firms, covering the period 1976-2015, produce estimates of Q that are quite close to the aggregate measure depicted in Figure 1. They show average Q increasing from a value less than 1 to a value of 2.¹⁴

The decline in Q from the 1960's through the mid-1980's is correlated with the significant decline in (before-tax) profitability from 1960's levels, visible in Figure 2.

¹⁰ Equity values are Nonfinancial Corporate Business; Corporate Equities; Liability, Market Value Levels ([BOGZ1LM103164103A](#)), and debt values are from Nonfinancial Corporate Business; Debt as a Percentage of the Market Value of Corporate Equities, Level ([NCBCMDPMVCE](#)), both via FRED.

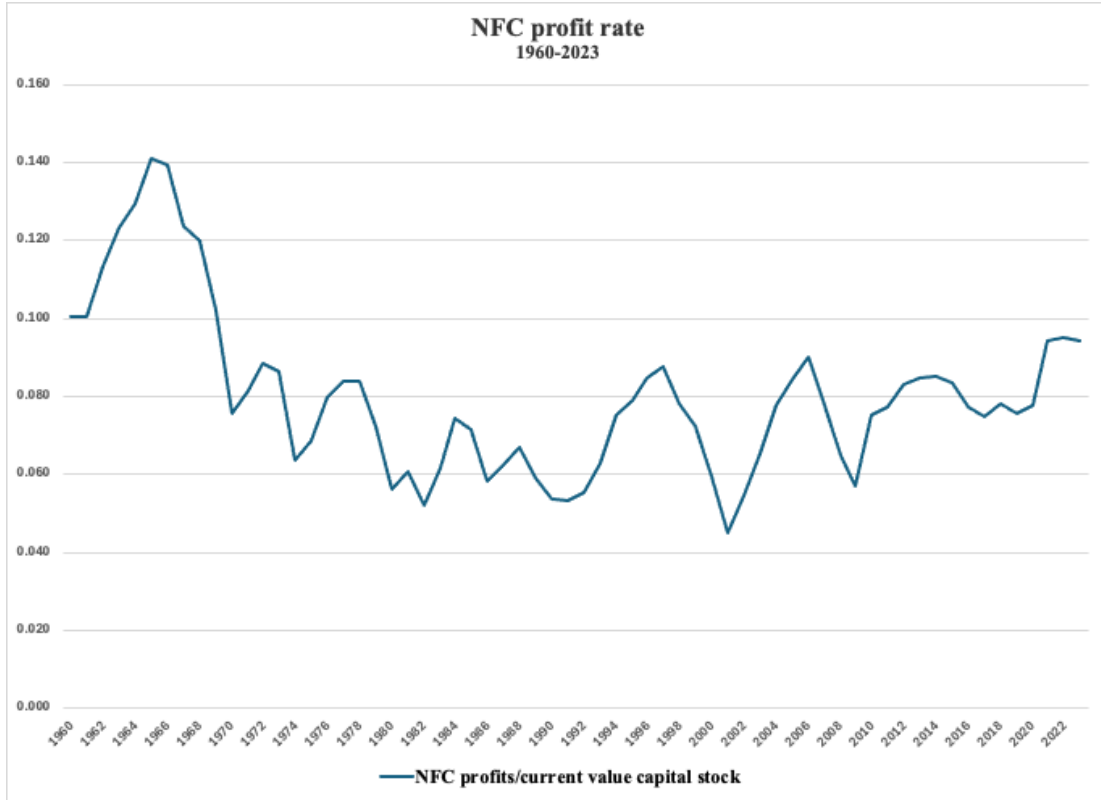
¹¹ See Richard Ogden et al., “Corporate Equities by Issuer in the Financial Accounts of the United States”, *FEDS Notes*, March 29, 2016, available at: <https://www.federalreserve.gov/econresdata/notes/feds-notes/2016/corporate-equities-by-issuer-in-the-financial-accounts-of-the-united-states-20160329.html#:~:text=Valuation%20of%20publicly%20held%20corporations&text=The%20total%20market%20value%20of,the%20S&P%20preferred%20stock%20index>.

¹² BEA Table 6.1, available at <https://apps.bea.gov/iTable/?reqid=19&step=2&isuri=1&categories=survey>.

¹³ See BEA, *NIPA Handbook*, ch.2, available at <https://www.bea.gov/resources/methodologies/nipa-handbook/pdf/chapter-02.pdf>.

¹⁴ See Jarsulic, *op. cit.*

Figure 2



The upward trend in Q since the mid-1980's cannot be explained by increases in the equity market values of the largest firms alone. Between the 1960 and 2013, the share of the 10 largest publicly traded firms in total market value trended down, as aggregate Q was trending upward. However, their share of market value increased significantly through 2023, as the returns of tech monopolies such as Microsoft, Apple, Alphabet, and Amazon increased dramatically. The 27 percent share of the top 10 in 2023 was, however, still slightly below the share attained in the 1960's.¹⁵

The excess of market valuation over replacement cost can be used to construct a quantitative measure of the rent component of revenue. Conceptually, $V = V_k + V_r$, where V_k is the discounted value of the competitive return to capital and V_r is the discounted value of rents. Thus, it follows that $Q = V/RC = V_k/RC + V_r/RC = 1 + V_r/RC$. Hence $1 - 1/Q = V_r/V$ is a measure of the rent share in total returns.¹⁶

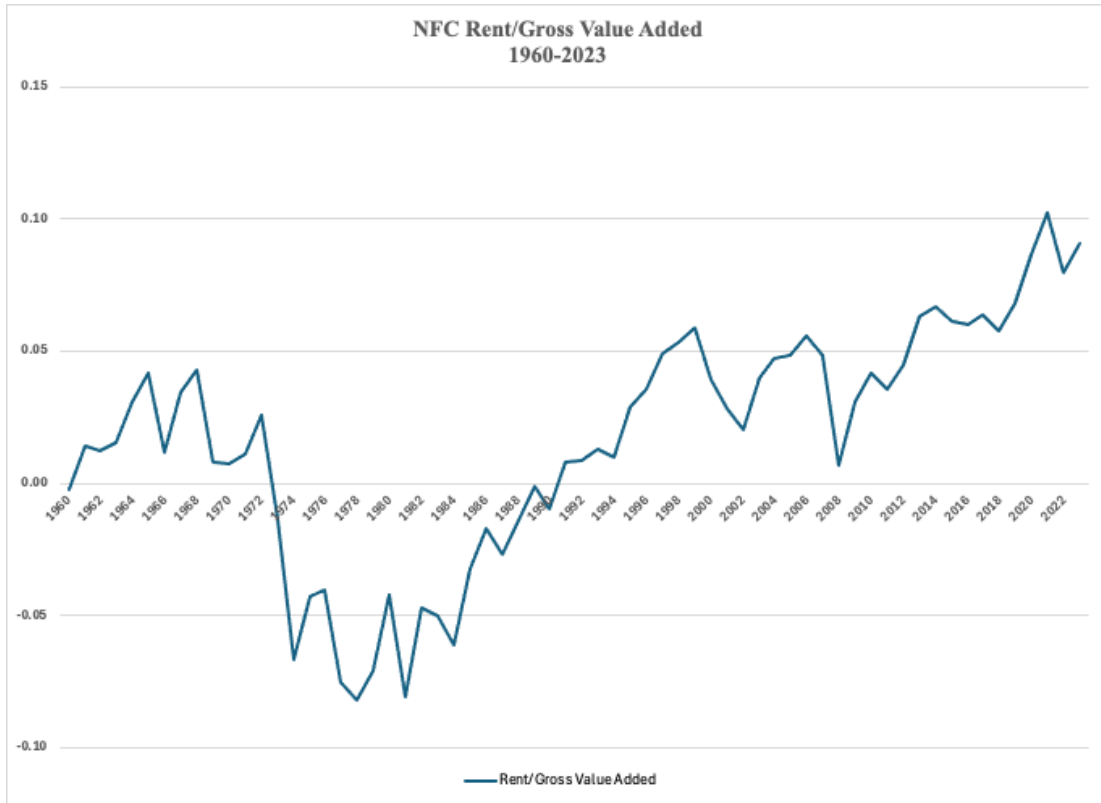
This measure of rent for the NFC sector, scaled by NFC gross value added, is depicted for 1960-2023 in Figure 3. It declines during in the 1970's, recovers beginning in the mid-80's, and rises

¹⁵ See Michael J. Mauboussin and Dan Callahan, "Stock Market Concentration, How Much is Too Much?", *Morgan Stanley Consilient Observer*, June 4, 2024, available at https://www.morganstanley.com/im/publication/insights/articles/article_stockmarketconcentration.pdf.

¹⁶ See Eric B. Lindenberg and Stephen A. Ross, *op. cit.*

well above 1960's values by 2023. This ratio, it should be noted, represents very significant money. The 10 percent share in 2023 corresponds to rent totaling \$1.4 trillion.

Figure 3



The recovery in profits and the surge in rents parallels the demolition of the New Deal institutions governing income distribution, which is well described by Frank Levy and Peter Temin.¹⁷ Union representation of workers in key sectors, a “Treaty of Detroit” wage bargaining framework under which productivity gains were shared between firms and their workers, a high minimum wage, and highly progressive taxation were all rolled back. The resulting repression of real wages is certainly a principal factor in the rise in rents.

However, the logic of arbitrage implies the surge in rents above 1960's levels cannot have happened without diminished competition. Rising rents create greater incentives for entry, but entry sufficient to hold rents even at 1960's levels has not materialized. This is a consequence of greater barriers to entry -- including increased market concentration because of economies of scale, the increased importance of intellectual property protection, the rise of business models protected by network externalities, the increase importance of proprietary digital data as an input in production.¹⁸ Antitrust law failed to significantly challenge this surge, because of lax

¹⁷ Frank Levy and Peter Temin, “Inequality and Institutions in 20th Century America”, NBER Working Paper no. 13106, May 2007, available at <https://www.nber.org/papers/w13106>.

¹⁸ See Jarsulic, *op. cit.*

enforcement by the antitrust agencies, hostile court decisions, and the failure of antitrust statutes to address the effects of monopoly power once it has been (legally) created.¹⁹

- **Using industry-level data to estimate the share of rent in nonfinancial business gross value added**

While the NFC sector is a huge part of the U.S. economy, it is not everything. Nonfinancial business (NFB), which includes partnerships and sole proprietorships as well as corporations, is about a third larger.²⁰ Fortunately, industry-level National Income and Products Accounts (NIPA) data for nonfinancial business are available. They provide another avenue for estimating the scale of rents, and a check on the values obtained by using market valuations of firms.

We use data for 1987-2023, including all the industries in the NIPA industry accounts with the exceptions of finance and insurance, management of companies and enterprises, and real estate.²¹ This gives us 55-industry panel. These data are enterprise-based, and include nonfinancial corporations, partnerships, and sole proprietors.²²

Industry-level data include net operating surplus (NOS) a profit-like variable defined as value added less compensation, taxes on production and imports less subsidies, and depreciation.²³ NOS is also equal, in NIPA, to the sum of net interest and miscellaneous payments (Netin)²⁴, business current transfer payments (Btp)²⁵, and accounting profits. Accounting profits include rent, and in the case of proprietors and partnerships, some amount of compensation that the NIPA's do not separate from net income.

¹⁹ See Mark Glick, "Antitrust and Economic History: The Historic Failure of the Chicago School of Antitrust", *The Antitrust Bulletin*, Volume 64, Issue 3, September 2019, pp. 295-340, available at <https://journals.sagepub.com/toc/abxa/64/3>.

²⁰ Nonfinancial business GVA was 33.6 percent larger than NFC GVA in 2023.

²¹ Detailed industry-level gross value added and other data are not available prior to 1987. The real estate sector was not included in the data set because most of it is comprised of owner-occupied housing, but the rental and leasing services and lessor of intangible assets sector is included. The management of companies and enterprises is deleted because it is essentially a financial enterprise.

²² See Bonnie A. Retus and Marina Rouleau, Returns for Domestic Nonfinancial Business, Survey of Current Business, April 22, 2025, available at <https://apps.bea.gov/scb/issues/2025/04-april/pdf/0425-domestic-returns.pdf>.

²³ Net operating surplus is defined in Bureau of Economic Analysis, "Glossary: National Income and Product Accounts, Updated November 2019", available at <https://www.bea.gov/resources/methodologies/nipa-handbook/pdf/glossary.pdf>. The relationship nonfinancial corporate net operating surplus and profits are illustrated in Bureau of Economic Analysis, NIPA Table 1.14., available at <https://apps.bea.gov/iTable/?reqid=19&step=2&isuri=1&categories=survey>.

²⁴ Net interest is equal to interest earned on financial assets less interest payments on debt, and is a measure of net financing costs. See Justin Harper and Bonnie A. Retus, op. cit., Chart 4.

²⁵ Business transfers are payments to persons from business (such as insurance payments to persons, and donations to nonprofits), and to government (such as fines, and tobacco settlements) and the rest of the world from business for which no current services are performed, see <https://www.bea.gov/help/glossary/business-current-transfer-payments-net>. For more detail on business transfer payments, see Bureau of Economic Analysis, NIPA, Table 7.7 and Table 3.7, available at

<https://apps.bea.gov/iTable/?reqid=19&step=2&isuri=1&categories=survey#eyJhcHBpZCI6MTksInN0ZXBzIjpbMwYyLDNlLCJkYXRhIjpbWyJjYXRlZ29yaWVzIiwuU3VydmV5IiIsWyJOSVBBX1RhYmxlX0xpc3QiLCIyODQiXV19>,

NOS can therefore be represented as

$$\text{NOS} = [\text{NetIn} + \text{Btp} + \text{Rent} + \text{Pcomp}] + R * K \quad (1)$$

where Pcomp is partner and proprietor compensation, R is the profit rate, and K is the capital stock.

Industry-level accounts unfortunately do not include industry-specific measures of net interest or business transfer payments, nor do they separate the share of proprietor and partnership net income that is actually compensation. However, we still can estimate the following specification using our panel data

$$(\text{NOS}/\text{Comp})_{i,t} = \beta_1(T) + \beta_2(K/\text{Comp})_{i,t} + \varepsilon_{it} \quad i = 1,55, \quad t = 1,37 \quad (2)$$

where T is the annual time index going from 1 to 37, and $\beta_1(T)$ is the ratio $[\text{NetIn} + \text{Btp} + \text{Rent} + \text{Pcomp}]/\text{Comp}$ in year T, and ε_{it} is an error term.

For each year we then multiply estimated $(\beta_1 * T)$ by aggregate compensation, and then subtract the aggregate values of NetIn, Btp and Pcomp from the total, to obtain the value of rent.^{26 27} The regression results for (2) are presented in Table 1. The estimated value of β_2 , .042, is close to back-of-the-envelope estimates of the equity risk premium.²⁸

²⁶ Pcomp is estimated in the following manner: Assume that the rate of return on capital should be the same for corporations and other legal forms of business. Since the observed rate of return on noncorporate business is significantly higher than the return on corporate business, treat the difference in return on noncorporate capital as proprietor and partner compensation. For a discussion of this method of estimating compensation, see “Estimating the U.S. Labor Share”, *Monthly Labor Review*, February, 2017, available at <https://www.bls.gov/opub/mlr/2017/article/estimating-the-us-labor-share.htm>. Note that this will contribute to an underestimate of rents, since the rate of return on corporate capital includes some rents.

²⁷ Vlokhoven, *op. cit.*, online appendix, describes an estimate of the rental share using an industry-level panel data set almost identical to the one used here. However, the Vlokhoven estimate uses (GVA-TLS)/Comp as a dependent variable, and a cubic term as the independent variable. It is not clear why GVA-TLS measures rent.

²⁸ See Barkai, *op. cit.*

Table 1

Oneway (individual) effect Within FGLS model

Balanced Panel: n = 55, T = 37, N = 2035

Coefficients:

	Estimate	Std. Error	z-value	Pr(> z)
KC	0.0399	0.00132	30.1602	< 2.2e-16 ***
T	0.0038	0.00051	7.41041	.259e-13 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

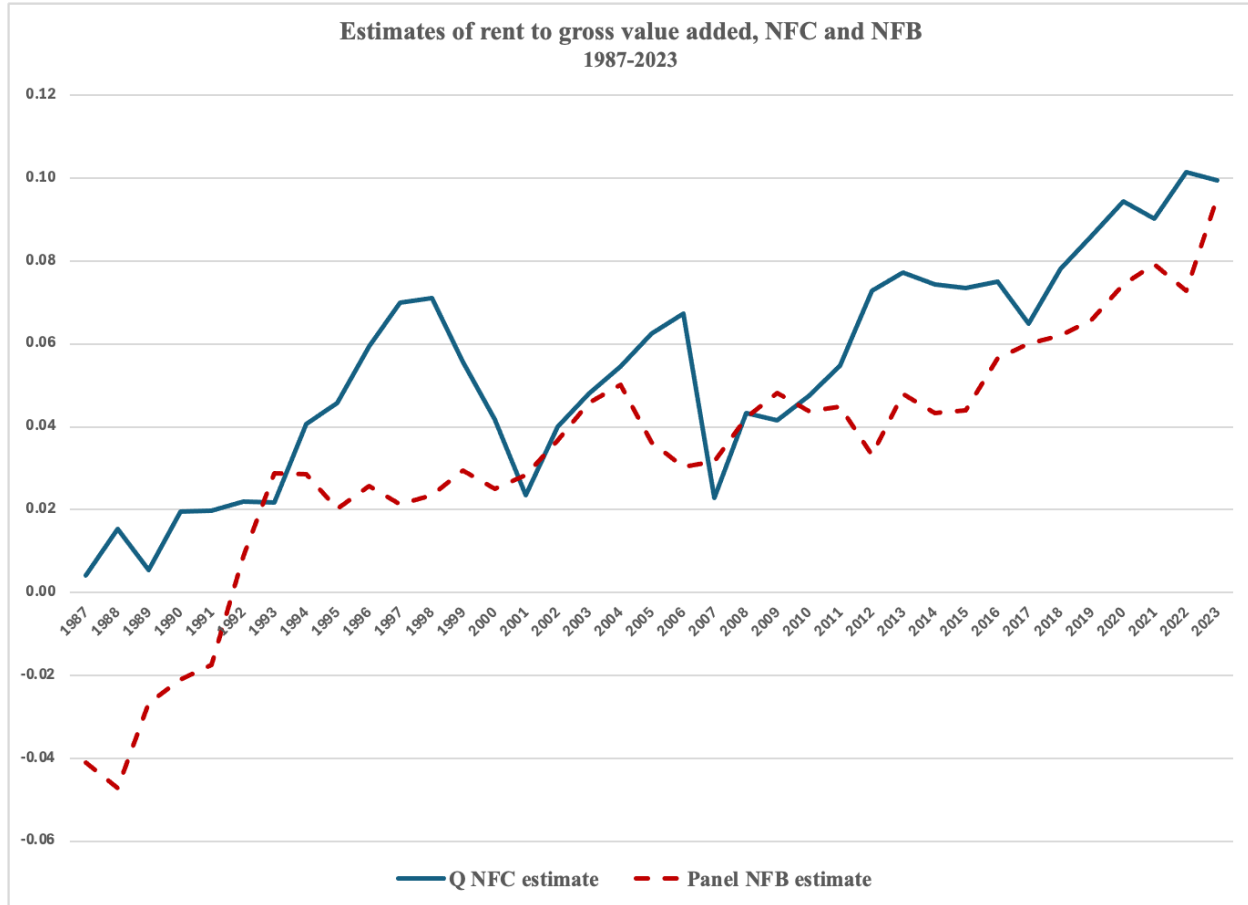
Total Sum of Squares: 2122.2

Residual Sum of Squares: 401.29

Multiple R-squared: 0.81091

The ratio of NFB rents to gross value, estimated using these regression results, are depicted in Figure 4, along with the estimated NFC ratio calculated using market values. The trend and levels of these two ratios are quite similar. The NFB ratio for 2023 is .091., while the NFC ratio is .10. The value of estimated NFB rent in 2023 is \$1.7 trillion.

Figure 4



- **Implications of large and increasing rents**
 - **Monopoly rent helps skew the distribution of income and wealth upward**

The estimates of rent discussed above illustrate how market power has contributed to the increasingly skewed distribution of household income. Even allowing for data limitations and statistical imprecision, the orders of magnitude are large enough to show a significant impact. The estimated \$1.7 trillion in NFB rents in 2023 amounted to a per capita “monopoly tax” of \$5,053, which was 6.3 percent of median household income.

These trends clearly have long term implications for productivity and income growth as well as income distribution. When rents are significant, incumbent firms have good reason to defend them. This can lead these firms to take economic, legal, or political steps to prevent the entry of new competitors, which, as a consequence, may prevent innovative products and processes from disrupting the marketplace.²⁹ High rents can also deter incumbents from focusing their own

²⁹ Luigi Zingales, “Towards a Political Theory of the Firm”, *Journal of Economic Perspectives*, Volume 31, No. 3, 2017, pp. 113-30, available at <https://www.aeaweb.org/articles?id=10.1257/jep.31.3.113>; Kiran Stacey, “Tech

efforts on developing and investing in innovation. The marked decline in nonfinancial corporate capital investment relative to corporate net income since 2000 is certainly consistent with rising market power.³⁰

While the negative economic effects of rising market power and rents are quite negative, the political economic consequences are potentially disastrous, as we can currently see. Those in control of firms with monopoly power are disposed to support or at least collaborate with right-wing politicians. The right may demand payoffs, but they give little serious thought to challenging rent extraction. Stagnant real working-class incomes, after all, create grievances that can be manipulated.

- **The scale of rent extraction creates a progressive policy option**

The scale and scope of rent extraction, and the general unpopularity of big business, create an opening for more progressive policy. A graduated tax on large corporate and other business profits, designed to recover a good fraction of rents, could serve multiple purposes. First, it would provide much needed funding for basic social programs. Medicare/Medicaid and Social Security, for example, each cost \$1.5 trillion annually.³¹ Both could be insulated from harmful cuts by taxing monopoly rents.

Second, such a tax would divert revenue that is used to expand the scale and scope of existing monopolies. The ability of established tech monopolies to dominate the implementation of large language model AI – something which, despite the huge resource advantage of the monopolies, was developed by others -- is a cautionary example.

Third, it would diminish the incentive to maneuver for monopoly power, since firm owners and C-suite executives would gain less from achieving it.

It ought to be noted that taxes on rents are not subject to the usual objections that taxes on profits will reduce employment by raising prices, or by incentivizing firms to physically relocate to lower tax jurisdictions. Revenue-maximizing monopoly prices will not change if rent is reduced. And so long as locally earned rents are taxable, physical location is not important.³² The incidence of a properly designed tax on rent is on the owners of capital.

companies spent record sum on US lobbying in 2018”, *Financial Times*, January 23, 2019, available at <https://www.ft.com/content/7147935c-1f34-11e9-b126-46fc3ad87c65?segmentId=778a3b31-0eac-c57a-a529-d296f5da8125>.

³⁰ Germán Gutiérrez and Thomas Philippon, “Declining Competition and Investment in the U.S.,” NBER working paper No. 23583, July, 2017, available at <https://www.nber.org/papers/w23583>.

³¹ Center for Medicare and Medicaid Services, *Fiscal Year 2024 Financial Report*, p. i, available at <https://www.cms.gov/files/document/cms-financial-report-fiscal-year-2024.pdf>.

³² See Paul Krugman, “Monopoly Rents and Corporate Taxation (Wonkish)”, *The New York Times*, August 31, 1971, available at <https://archive.nytimes.com/krugman.blogs.nytimes.com/2017/08/31/monopoly-rents-and-corporate-taxation-wonkish/>; see also Mark P. Knightly and Donald J. Maples, “An Overview of the Corporate Income Tax System”, Congressional Research Service, April 24, 2023, for a discussion of the various theories of corporate tax incidence, available at <https://www.congress.gov/crs-product/R47519>.

