"Increasing Differences between Firms: Market Power and the Macro-Economy" by John Van Reenen

Discussion by Valerie A. Ramey (University of California, San Diego and NBER) August 2018

I. Introduction

This fine paper by John Van Reenen surveys the emerging evidence on global declines in labor shares and rising concentration and evaluates recent arguments that these are signs of distortions caused by rising market power. This paper makes a valuable contribution by critically evaluating the existing evidence, including the Van Reenen's own work Autor, Dorn, Katz and Patterson, as well as the competing arguments and stories. The paper also asks the important question: how should policymakers respond?

Van Reenen's bottom line is that alarms about rising market power and reduced dynamism have been premature. I agree completely with this conclusion. Hence, my remarks consist of reviewing the big picture and adding further support to this conclusion.

I group my comments into three areas. First, I sort the evidence into two categories – fairly well-established facts and controversial findings – based on my judgment of the evidence available at this point in time and summarize the two leading stories explaining those facts. Second, I also caution that the evidence is far too preliminary for policymakers to start taking action. As part of this argument, I offer a case study that illustrates the need for some detailed case study analysis in the traditional of the older "Structure- Conduct-Performance" literature. Third, I discuss the implications (or lack thereof) for monetary policymakers.

II. The Evidence and Stories

A. The Evidence

There are quite a number of recently documented time series trends and cross-sectional correlations, along with many nuanced details about those results. I present my view of which of those facts are more firmly established and which are still controversial. It should be understood,

however, that new evidence could come to light that could make a fairly well-established fact become controversial and vice versa.

1. Fairly well established facts.

(i) There has been a decline in labor share, starting around 1980 and in some cases speeding up after 2000, in the U.S. and in many other developed countries.

Olivier Blanchard (1997) was one of the first to note a decline in labor share in a number of European countries. At that time, no trends were yet evident in the Anglo-Saxon countries. Karabarbounis and Neimann (2013) later carefully documented the decline in labor share across many countries, including the Anglo-Saxon countries. While there are some questions about the measurement of labor share, and some permutations lead to more or less decline, the decline is relatively robust for many countries.

(ii) Most of the decline in the labor share, at least in the U.S., is due not to labor share declining at individual firms but rather to a reallocation of sales towards large and growing firms that are characterized by low labor share.

This feature of the decline in the labor share was established by Kehrig and Vincent (2017) for manufacturing plants and by Van Reenen and his co-authors (Autor et al., 2017) for the broader economy. This feature highlights the possibility that firms with heterogeneous productivities and growth rates are a central part of the explanation of the decline in labor share.

(iii) Concentration has risen in many (though not all) sectors in the U.S. and across the OECD. Concentration ratios based on sales are rising more rapidly than concentration ratios based on employment.

Autor et al. (2017) document the increase in concentration in the U.S. Whether concentration has increased as much in Europe as in the U.S. is still controversial:

Gutierrez and Philippon (2018) argue that the rise is less in Europe based on a data set with a selection of firms, whereas Criscuolo (2018) finds a rise in the EU similar to the rise in the U.S. based on a data set of the universe of firms.

2. Currently controversial results

(i) Markups of price over marginal cost have risen dramatically since 1980.

A number of years ago, Christopher Nekarda and I were studying the cyclical behavior of markups over the business cycle but also noticed a secular upward trend that became pronounced starting in 2000 (Nekarda and Ramey, 2013). Our measure of markups was closely related to the inverse of the labor share; hence, the now well-known decline in the labor share showed up as an increase in the markup.

More recently, several papers have used various alternative methods to measure markups and they are finding an even more pronounced increased. For example, de Loecker and Eeckhout (2017) use the inverse of the cost of goods sold to revenue and find astronomical increases in the markup in the U.S., rising from 1.2 in 1980 to 1.6 now. A markup of 1.6 means that price is set 60 percent above marginal cost. In a recent paper, they extended their analysis to many other countries and find similar increases in North America and Europe, with smaller increases in emerging economies in Asia and Latin America (de Loecker and Eeckhout, 2018).

Markups are notoriously difficult to measure because marginal cost is so difficult to measure. Most of the leading methods appear sensible. However, the results of de Loecker and Eeckhout have implausible implications. For example, Susanto Basu's (2018) discussion of their paper at the Banque de France/Deutsche Bundesbank conference in Paris in June pointed out that a markup of 1.6 on gross sales implied a profit rate of 66% of GDP!

(ii) Profits rates in the U.S. have risen since 1980. However, over the entire post-WWII period, profit rates exhibit a U-shape, with higher rates in the 1950s, falling to lows in the 1970s, and rising again after 1980.

Standard ways of measuring capital shares suggest a large and growing residual share of income not accounted for by labor or capital. Papers, such as by Rognlie (2015) and by Barkai (2017), call this residual share "profit rates" and show that it has increased in the last several decades. Rognlie (2015) and Barkai and Benzell (2018) extend the data back to 1947 and find a U-shape, with profit rates declining until 1980 and then rising.

However, Karabarbounis and Neimann's (2018) recent NBER Macro Annual paper considers plausible explanations for this residual income, which they call "factorless income." They cast doubt on its being profits by noting that this measure of the profit share has a correlation of -0.91 with real interest rates, measured as the difference between 10-year U.S. Treasury bonds and expected inflation. This near-perfect negative correlation is highly suspicious because it suggests that Treasury bond rates may be not be the right interest rate for imputing capital income. Thus, proper measurement of capital share might result in a smaller residual.

B. The Stories

The facts that I just outlined, both the better established and the more controversial facts, have led to two leading explanations, one pessimistic and one more optimistic. These two explanations are:

1. There has been a rise in market power by firms in product markets, and more so in the U.S. than in Europe.

Furman (2018), De Loecker and Eeckhout (2017), and Gutierrez and Philippon (2018) all advocate this view and suggest that lax antitrust regulation may be at fault. Measured trends

in markups and profit rates are consistent with this story. But recall that I classified those results in the "controversial" results category.

2. Superstar or Hyperproductive Firms

This story is the much more optimistic story suggested by Kehrig and Vincent and Autor et al. (2017). They argue that globalization and new technologies have simply changed the nature of competition without necessarily decreasing it. In their story, fluid markets have reallocated resources toward the larger, more productive and more profitable firms. These firms tend to have lower than average labor share, so this reallocation process affects aggregate labor share.

This story builds on an important body of work that finds that reallocation of resources from less efficient firms to more efficient firms has been the source of much of the productivity growth in industrialized countries over the years. One puzzle for this story, however, is the evidence of decreasing business dynamism by Decker et al. (2014): if resources are being reallocated to the superstar firms, why don't we see the "loser" firms exiting?

III. Why We Need More Case Studies: An Illustration

The existing "bird's-eye" results, while important guides to where further explorations should be directed, are not sufficiently detailed in themselves to suggest a change in policies. Moreover, most of the research is very recent and most has not yet been published in peer reviewed journals. Some commentators have been far too quick to jump to conclusions based on intriguing, but very preliminary, research. For example, higher markups do not mean more market power. Higher markups could be due to a decline in variable cost relative to fixed cost. The fact that it is occurring across so many countries suggests that it may be technology, not institutions.

John Van Reenen bemoans the fact that many of the insights from the classic "Structure-Conduct-Performance" of Bain and Demsetz in classic industrial organization have been lost. I agree completely. In fact, I believe that an important way to get more definitive answers is to conduct the detailed case studies that were the hallmark of that literature.

Let me illustrate the need for such studies with an example based on detailed case studies that illustrates the complexities in inferring market power from measures that have been used in the current literature. I use the example of the automotive industry in the post-WWII U.S. Detailed industrial organization studies have documented the high degree of market power this industry had, not just in the U.S., but worldwide in the early post-WWII period. The "Big Three" automakers in the U.S. accounted for over 70 percent of world motor vehicle production and almost 100 percent of U.S. production in the 1950s. However, competition from Japanese imports starting in the 1970s changed the market structure. The U.S. government erected barriers to imports at the behest of the domestic producers, but foreign firms responded by building their own plants in the U.S. By all measures, the market power of the domestic automobile firms in these industries is significantly lower now than it was in the 1950s and 1960s. The Big Three automobile makers now account for only 45 percent of U.S. market.

What happened to their labor share as their market power fell? To answer this question, I analyzed data from the NBER-CES Manufacturing Industry Database (Becker, Gray, Marvakov, 2016). As the graph shows, the labor share of value added in automobile assembly showed virtually no trend before 1980, then *fell* steeply after 1980 to a new lower level. If I constructed markups the standard way, using inverse labor shares, I would find higher markups now than in the heyday of U.S. automobile industry. Thus, standard measures of markups are moving in the opposite direction of market power.

Why, then, did labor share fall in the automobile industries? One possibility is a change in technology – it is well known that this industry adopted new technologies in which capital (such as robots) replaced labor.



Notes. Based on discussant's analysis of data from SIC 3711 in the NBER-CES Manufacturing Industry Database.

But there is another reason that labor share and the market power of firms do not necessarily move inversely. As George Borjas and I argued in a paper over 20 years ago (Borjas and Ramey, 1995), during the 1950s and 1960s durable goods firms such as automobiles and steel earned significant rents because of their market power in world and domestic markets. However, the combination of New Deal legislation and the lack of much competition from foreign workers gave unions significant bargaining power. The unions forced the firms to share their rents with their workers in the form of higher wages. Borjas and I argued that this rent sharing through wages could explain why less educated workers earned high relative wages in the 1950s and 1960s. This rent sharing can also explain why the labor share was relatively high in the 1950s and 1960s despite the industries' market power and concentration.

I think that there is a larger lesson to be learned from this story. Bird's-eye view statistics such as those presented in the recent research are extremely useful for suggesting areas that need more study. However, to understand whether there really is a change in the competitive nature of industries, one needs to do more detailed industry studies.

IV. Implications for Monetary Policy

Suppose we did find that steady-state markups are truly higher now. What should monetary policy do? According to the standard New Keynesian model, the answer is "nothing." In that model, the size of the steady-state markup does not influence the effectiveness of monetary policy. Of course, if central bankers know that there is a large distortionary wedge in the economy, they might be tempted to use inflation to reduce it. However, central bankers understand that increasing the steady-state inflation rate would create incentives for more frequent price adjustment which would simply undo the central bank's attempts to reduce the markup.

V. Conclusions

In sum, this is an exciting area of research and John Van Reenen and his co-authors have made important contributions in providing evidence for their superstar firm explanation. However, all of the evidence is very preliminary. The next step is detailed industry studies. While policymakers should keep a watchful eye on the emerging evidence, it seems that any major changes in policy should occur only after more evidence has accumulated.

References

Autor, David, David Dorn, Lawrence F Katz, Christina Patterson, and John Van Reenen. 2017. "The Fall of the Labor Share and the Rise of Superstar Firms." National Bureau of Economic Research working paper, no. w23396.

Barkai, Simcha. 2017. "Declining Labor and Capital Shares." Unpublished manuscript. London Business School.

Barkai, Simcha and Seth G. Benzell. 2018. "70 Years of US Corporate Profits." Unpublished manuscript, University of Chicago Booth.

Basu, Susanto. 2018. Discussion of de Loecker and Eeckhout at the presented at the Banque de France conference *Monetary Policy Challenges*, June 21-22, 2018.

Becker, Randy, Wayne Gray, and Jordan Marvakov. 2016. NBER-CES Manufacturing Industry Database. National Bureau of Economic Research. Nber.org

Blanchard, Olivier. 1997. "The Medium Run." *Brookings Papers on Economic Activity*, No. 2., 89 – 158.

Borjas, George J. and Valerie A. Ramey. 1995. "Foreign Competition, Market Power, and Wage Inequality." *The Quarterly Journal of Economics*, 110 (4), pp. 1075-1110.

Criscuolo, Chiara. 2018. "What's Driving Changes in Concentration Across the OECD?" Paris: OECD mimeo.

Decker, Ryan, John Haltiwanger, Ron Jarmin, and Javier Miranda. 2014. "The Secular Decline in Business Dynamism in the US." *Unpublished draft, University of Maryland* (2014). De Loecker, Jan and Jan Eeckhout. 2017. "The Rise in Market Power and the Macroeconomic Implications." National Bureau of Economic Research working paper, no. 23687.

De Loecker, Jan and Jan Eeckhout. 2018. "Global Market Power." National Bureau of Economic Research working paper, no. w24768.

Furman, Jason. 2018. "Note on Market Concentration." Presented at the OECD Hearing on Market Concentration. June 7.

Gutierrez, Germán and Thomas Philippon. 2018. "How EU Markets Became More Competitive than U.S. Markets: A Study of Institutional Drift." Presented at the Banque de France conference *Monetary Policy Challenges*, June 21-22, 2018.

https://www.banque-france.fr/sites/default/files/investment-less_growth_paper.pdf

Karabarbounis, Loukas, and Brent Neiman. 2013. "The Global Decline of the Labor Share." *The Quarterly Journal of Economics* 129, no. 1: 61-103.

Karabarbounis, Loukas, and Brent Neiman. 2018. "Accounting for Factorless Income." Forthcoming *NBER Macro Annual*.

Kehrig, Matthias, and Nicolas Vincent. 2017. "Growing Productivity Without Growing Wages: The Micro-Level Anatomy of the Aggregate Labor Share Decline." Unpublished draft, Duke University.

Nekarda, Christopher J. and Valerie A. Ramey. 2013. "The Cyclical Behavior of the Price-Cost Markup." National Bureau of Economic Research working paper w19099, June.

Rognlie, Matthew. 2015. "Deciphering the Fall and Rise of the Net Capital Share: Accumulation or Scarcity?" *Brookings Papers on Economic Activity*, Spring 2015, pp. 1-69.