

Overview Panel

Raghuram G. Rajan

As the last speaker, I want to try to give an overview. Based on the previous days' discussions, I want to focus on four topics. First how should we see the efficiency versus market power debate as it pertains to changing market structure. Second, what does this mean for innovation and dynamism going forward—and I confess that I'm a consumer of this literature, not a practitioner, so take it as an outsider's view. Third, is the issue of distribution that came up in the discussion. We didn't spend much time on it, but I think it's extremely important as we think about implications for policy. And finally, I'll conclude with implications for policy, especially monetary policy.

I. Efficiency

Let's start with efficiency. What do we know and what did we learn? We know some facts that have caused concern. We know from John Haltiwanger's work that entry rates have been falling. From Jay Ritter, we know the number of initial public offerings have been falling. More and more young firms are agreeing to be acquired rather than growing and becoming large public firms. Exit rates—that if firms leaving industry—have been relatively flat despite an increase in the dispersion of productivity, suggesting a lack of dynamism in industry in which the worst producers aren't getting knocked out.

Concentration measures are up, even if we don't quite know what that means, and there's debate about whether they're up in Europe. This matters, of course, because Europe is considered to have somewhat tighter antitrust policy. And, if it's not up in Europe, perhaps the antitrust policy explains the difference between Europe and the United States. We have sustained higher profitability in the United States; probably not in Europe, and it's not clear what that means. Some would argue it represents growing monopolization of U.S. industry. It also could mean more innovation in the United States—that superstar firms continue to innovate, stay ahead of the curve and display higher profitability as well as better management. But when all of this is brought together, we are faced with the reality that we have low overall productivity growth.

I think that's an important reason why industry structure is worth studying; more specifically, is industry structure responsible for the lower productivity growth that we see? Should we be worried by the fact that investment or research and development is being slowed by industry domination or, relatedly, the diffusion of innovation from superstar firms is being slowed? To me, the papers we saw seem to suggest not so much the old kind of market power, but that there's something new going on. Some of this concentration, some of these markups are because of a shift in market share toward better-managed firms, more productive, more innovative and higher-quality management. In some sense, the capable seem to be congregating together in these superstar firms to become super-capable. Should we be happy about that? We'll come to that in a bit, but it suggests these firms that are increasing market share are pretty good. And at least from the perspective of efficiency, they are not gaining market share simply because they are acquiring other firms while antitrust appears to not be standing in the way. Also, there's evidence that this isn't related to a rise in prices, which you might think is the first consequence of getting market share and monopolization. Another possibility, though, is that firms are becoming more efficient but are not passing on the savings. Although it's not showing up in the form of rising prices, even flat prices in that case would be a source for concern.

Nicolas Crouzet and Janice C. Eberly's paper also seem to suggest that growing concentration is related to the rise in intangibles. They separate between industries, and if you look deeper at industries, there are some where growing productivity seems to be the dominant explanation for higher profits, some where market power seems to be the dominant effect. We saw a very nice paper this morning by Alberto F. Cavallo suggesting that consumers seem to be benefiting, in that some of the productivity gains Crouzet and Eberly find seem to be passed through in more rapid price changes. On the other hand, health care seems to be a situation where you have growing dominance without the benefits necessarily being passed on to consumers. Ultimately, the question we have is "Will these superstars who are superefficient pass on the benefits of all their efficiency to consumers?" Clearly, they seem to be doing that. In the initial competition for the market, many of these often talked about giants—Facebook, Google, etc.—are not charging for their products, and have passed on some of the benefits to consumers. Of course, we should still ask: (1) Is this a fair trade for the data they are getting in return? (2) Are they charging someone else so that eventually the customer pays, so looking directly at the customer firm interaction is myopic? (3) How long will this last and is there a worry about long-term dynamism of these markets?

II. Innovation

Typically, I think the industrial organization economists would answer that it depends on whether you have potential competition to entry and potential competition from disruptive innovations. That competition comes not just from within industry, but from left field. And the question is "How likely is all this going forward even if we don't worry too much about the effects on competition today?" It's here that I think there's more reason to worry.

The data on slowing entry is a concern, especially the data on young companies being bought out, sometimes primarily to shut down products that might serve as competition. There is evidence that this has happened in the pharmaceutical industry, but we also know that some of these big FANGs (Facebook, Amazon, Netflix and Google) have done it in the past. Such activity is also curbing

lending or financing by venture capitalists, who talk about a “kill zone” where a product gets too close to the existing big players. They won’t finance anything in the kill zone because there’s no prospect for growth there, and that suggests some limited competition.

Where is this coming from? It could be that these players are monopolizing access to customers. Maybe their access to data gives them an advantage. Perhaps they have the ability to use data in ways that they can discriminate between customers. Antoinette Schoar had a very nice paper in which she talked about how they may be exploiting the least-able among customers to extract rents. Of course, we must also not forget the lock-in created by network effects. It is possible we may not see the extent of competition going forward that we saw in the initial phase when they all were competing for market share, and that’s certainly a worry.

As the numbers of firms come down, the point that Alan Krueger made quoting Adam Smith, who was very worried about collusion between firms, becomes relevant. The worry here is if the numbers get really small, do you have tacit or explicit collusion, both vis-à-vis the customer, but also in other markets; for example, labor markets and perhaps in intermediary goods. But I think one of the biggest worries from the data that we saw comes from the pace of diffusion, that there does seem to be evidence of it slowing in these superstar-dominated industries. And that suggests, perhaps because of intellectual property protection or constraints on labor mobility between firms (which Krueger brought up), that we’re preventing some of the new ideas from going into the rest of the economy, which is why we may be seeing increasing productivity dispersion within industry and low overall productivity growth, etc. That seems to be something to be worried about—more broadly, worrying less about today’s efficiency and more about tomorrow’s efficiency and the pass through to consumers.

III. Distribution

The third issue is distribution. The discussion about superstar firms essentially centers on whether we feel better when we’ve transformed the problem of stagnant median wages into one of stagnant median

firms. There is little doubt there is a wide distribution of wages within the economy. At the risk of oversimplifying, all the good wages are in some firms and not in the rest. I'm not sure if that makes anyone feel better, but it suggests a congregation of capabilities. It suggests people who don't have those capabilities, who are in firms that are straggling behind, are going to continue to ask the same questions: "How come the elite are making away with everything?" It doesn't help that all the elite are in superefficient firms like Google. It doesn't make it any more fair in the public dialogue; it's just that they are making away.

Another concern is that some of this comes from discrimination. We talked about Antoinette Schoar's point on discriminating against less-flexible, less-capable customers, and how that might be worrisome given the growth of superstar firms with a lot of data.

A third source of worry is Alan Krueger's point about collusion. Here, with respect to certain markets, we're talking about monopsonies rather than monopolies. What then do we take away for policy while knowing we're still struggling with the data, we're still struggling to understand what this all means and how it comes about?

IV. Policy

One takeaway I see is the worry about dynamism and continuing innovation; worry about what today's structures and behaviors say about tomorrow's structures; worry about how intellectual property is being used; worry about how data are being used and figuring out whether you have to bring instruments into play other than antitrust. For example, if you want greater diffusion, should you, as some have suggested, make data the property of the individual? Firms then effectively could be forced to buy the data from the individual; the individual in turn would not be tied to any entity and could distribute the data to other competitors. It would be similar for platforms, where you would ask for interoperability so others can link onto the platforms and thereby the extent to which you're tied in to a particular structure is more limited.

On labor, for example, should you have antitrust moving against some of these "noncompete" constraints on labor mobility saying

they're restraints of trade? Similarly for occupational licensing—do you try to prevent the extent of licensing? That's one of the few areas where the people with the greatest interest in protectionism are in fact in charge of licensing rules—boards dominated by lawyers determine state licensing norms for lawyers. Shouldn't outsiders determine the extent of occupational licensing? I thought the last paper we saw, the Corbae-Levine paper, was a way of thinking about how to bring these other instruments into play, for example, governance and leverage requirements.¹

V. Monetary Policy

Let me end by talking about what all this means for monetary policy. Some of the papers raised questions about whether it'll be as effective. For example, if a lot of firm value, a lot of firm investments comes from intangibles, then there's less collateral available. And therefore, you might argue that the bank lending channel probably is less effective because of the lower availability of collateral. Now, I would caution on taking this too far because there are papers now, one by my new colleague Yueran Ma and her co-author Chen Lian, that argue debt also is moving away from debt based on collateral to debt based on earnings. A lot of debt now comes with earnings-based governance, which seems to be accommodating the rise of intangibles by focusing on cash flow rather than assets. Another is a paper we had this morning: "What's the effect of higher pass-through, is there actually higher pass-through?" These questions could well be debated. Alan Krueger raised the point yesterday of whether we should run hot when labor markets are tight because interfirm collusion to suppress wages breaks down once we get to a sufficiently tight labor market. Of course, there's the real question of if the economy is allowed to run hot, do real wages rise or not? That's worth checking, but it also raises this question of whether our inflation-targeting framework, which wants to keep a certain level of inflation, is the right framework for that kind of distributional concern.

Let me end by saying the largest effect of all these structural changes in the economy is—Stephen Poloz also talked about this—to the political economy of central banking. This great fear of technological change, but coupled with the general unhappiness with the quality

of jobs and I think the work on superstar firms, suggest many people have a reason to be unhappy. They're stuck in the nonsuperstar firms, and harbor a general post-Great Recession unhappiness with the elites and their policy agenda. They worry whether the elites have the right incentives.

And here, central bankers are the quintessential elite. Right? They have so many strikes against them. They meet periodically behind closed doors in Basel, that faraway place. They are citizens of nowhere. They talk about global effects, systemic effects—they don't talk much about local Main Street effects, except as it pertains to inflation. Many have Ph.Ds, so they're overeducated and they talk in a language nobody else understands. Put this all together and add the general fact that people still don't fully understand the complicated trade-off between inflation and unemployment. Mix in grievances such as why the financial sector was rescued while Main Street did not get as much of a benefit. And throw in any concern central bankers have about the world, when in fact the nation is not doing so well. Why do central bankers have any concerns about the outside world? All this—essentially what every central banker has to think about—becomes suspicious to somebody who doesn't have the same kind of understanding as the people in this room. And that leads to a tremendous loss of trust.

Central banking is difficult in the first place, even more so in an environment where both the public and politicians—who aren't adverse to throwing bricks at the central bank—have lost trust. In fact, politicians think it is worthwhile to attack elite central bankers because it enhances their image among their constituencies. I think that's a difficult environment, and I think it is related to the structural changes occurring in the economy. The central concern of central bankers moving forward, and I think Stephen talked to this, is how do you rebuild confidence in the objectives of the central bankers in an integrated world where to be objective you have to think beyond the domestic toward the international, and where you have to accommodate the structural changes that are the subject of this conference? To my mind, that is the biggest task we have.

Endnote

¹One question I had about that paper, this is as an aside to the broader point, is that as you increase competition a natural facet of competition is you look for new profit opportunities. The old ones are no longer available. So, you are competing for essentially riskier entities. It may not be just an increase in risk taking as a result of lower franchise value. It could be a natural effect of competition. As the low-hanging fruit are taken, you look for the fruit higher on the tree. This then means that almost naturally with more competition you will make mistakes because you're searching further out on the spectrum. In turn, now you need more equity, but just because you need more buffers and not because of incentives. The issue of equity as a buffer rather than an incentive is something we should think more about.