Research Briefs



IN ECONOMIC POLICY

FEBRUARY 20, 2019 | NUMBER 151

Diverging Trends in National and Local Concentration

By Esteban Rossi-Hansberg, Princeton University; Pierre-Daniel Sarte, Federal Reserve Bank of Richmond; and Nicholas Trachter, Federal Reserve Bank of Richmond

ost product markets are local. This is because the transportation of goods and people is costly, so firms set up production plants, distribution centers, and stores close to customers. A coffee shop or restaurant in Manhattan does not compete with similar establishments in Seattle, and probably not even in Brooklyn. The wedge in prices or costs created by the inconvenience of buying a product far away from the desired consumption point shields companies in different locations from direct competition. Of course, the size of these costs, and therefore the geographic extent of the market, varies by product. Markets are also product-specific. Producers of a particular product are shielded from competition by producers of distinct but related goods and services to the degree that their consumption requires households to move away from their ideal variety.

Much has been written recently about the increase in national market concentration observed over the last two decades and the role that large national firms have played in driving this trend. The evidence for the rise in concentration is uncontroversial; the share of the largest firms and the Herfindahl-Hirschman Index, among other measures of concentration, have increased consistently in most sectors since 1990. A narrative has emerged whereby this increase in national concentration is perceived as the cause of lower product-market competition. This fall in competition is then viewed as the culprit of other apparent trends, such as rising markups and market power, the increasing profits of large firms, declining labor market dynamism and firm entry, and a declining labor share. All these trends—and particularly those related to concentration, markups, and profits—point to the notion that market power has been increasing. While the empirical robustness and validity of some of these trends have been contested in recent work, the rise in national market concentration remains their main empirical foundation.

We document four main facts regarding national and local product-market concentration in the U.S. economy between 1990 and 2014. We make use of the National Establishment Time Series (NETS) dataset, which covers the universe of U.S. firms and their plants. The dataset includes sales and employment numbers for plants at different levels of geographical and industrial disaggregation.

Our first fact is that the observed positive trend in market concentration at the national level has been accompanied by a corresponding negative trend in average local market concentration. We observe an increase in concentration at the national level across the vast majority of sectors and industries but a fall in concentration when it is measured at the core-based statistical area, county, or ZIP code levels. The narrower the geographic definition, the faster the decline in local concentration. This is meaningful because the relevant definition of concentration from which to infer changes in competition is, in most sectors, local and not national.

The second fact shows that local concentration is falling across a range of industries that together account for 77 percent of employment and 70 percent of sales. Furthermore, in industries where national concentration is rising, industries where local concentration has declined account for the majority of employment overall (70 percent of employment and 65 percent of sales) across all major sectors. The presence of these diverging trends is always large, but it is more pronounced in services; retail trade; and finance, insurance, and real estate relative to wholesale trade and manufacturing. This ordering is natural given that transport costs are less relevant in the latter two sectors. Together, these first two facts underscore an unmistakable decline in local concentration that is pervasive across all sectors.

How does one reconcile a positive trend in national concentration with a negative trend in local concentration? Our third fact shows that, among the industries that exhibit this pattern, top firms have accelerated these trends. That is, excluding the top firm in each industry (in terms of national sales in their industry in 2014), the national increase in concentration naturally becomes less pronounced. Perhaps more surprisingly, the decline in local concentration also becomes less pronounced. Put another way, while large firms have materially contributed to the observed increase in national concentration, they have also contributed to the observed decline in local concentration. Among industries with diverging trends, large firms have become bigger, but the associated geographic expansion of these firms, through the opening of more plants in new local markets, has lowered local concentration, which suggests increased local competition. In the considerably smaller set of industries where we observe increases in both national and local concentration,

top firms have also been responsible for increases in both forms of concentration.

Our fourth fact establishes that, among industries with falling local concentration, the opening of a plant by a top firm is associated with a decline in local concentration at the time of the opening and that this lower level of concentration persists for at least the next seven years. This observation provides further evidence that, in those industries, large enterprises do not enter and dominate the local market but instead lower its concentration, either by competing with the previous local monopolist or simply by adding one more establishment that grabs a proportional market share from other local establishments. In any case, the notion that entry by large firms eliminates local producers to the point of increasing concentration is certainly not supported in the vast majority of industries where most U.S. employment resides.

Consider the much-publicized case of Walmart. Most of Walmart's establishments are in the discount department store industry, an industry with increasing national concentration and declining local concentration. Consistent with fact four, when Walmart opens a store, concentration falls in the associated ZIP code. In contrast, when computing the concentration without considering the opening Walmart establishment, concentration remains constant. One can also consider the effect of Walmart on the number of firms in a local market. When Walmart enters, the total number of establishments in the ZIP code increases, though by less than one-to-one (about 3/4). In other words, Walmart generates some exit, but the net result of opening a Walmart store is a greater number of competitors in the market for at least seven years after entry. This case is paradigmatic, but there are many others across all major sectors. For example, the expansion of Cemex, the top firm by sales in 2014 in the ready-mixed concrete industry, led to a similar decline in local concentration and an expansion in the local number of establishments in the industry.

Our findings challenge the view that product-market concentration is increasing in the United States. They do so not by challenging the evidence that national concentration has increased—we actually provide additional evidence for that effect across many industries—but by observing that this national trend does not imply a positive local trend in concentration. In fact, we show that it implies the opposite in most industries: a declining trend in concentration. Ultimately, concentration matters because it can lead to less competition. Hence measures of concentration must be aligned with product markets, as well as their geographic and industrial scope. In particular, for the majority

of industries, concentration is likely more relevant to firm pricing and other strategic behavior at the local level. Our findings are also consistent with the mixed evidence found in recent literature regarding secular changes in markups across individual industries. If local competition matters, we should not see increases in markups or profits in the markets where local competition is increasing. The measurement of markups in local markets associated with particular industries depends on important assumptions and requires very detailed data. The NETS data does not allow us to calculate these local statistics, but there exists evidence of flat markups over time in specific industries with declining concentration and in the aggregate.

The facts we document are directly relevant to the design of antitrust policy and other policies that can prevent successful firms from growing at the national level. We document heterogenous trends across industries, and in some industries, concentration is clearly rising both at the national and local level. However, our results should provide pause for policymakers who worry about increases in market power. In most industries, large firms are lowering local concentration, and therefore most likely increasing product market competition. Carl Shapiro, a former deputy assistant attorney general at the Antitrust Division of the Department of Justice and member of the Council of Economic Advisers under Barack Obama, makes a similar argument. Discussing evidence of the positive trend in national market concentration, he observes: "So, while these data do reflect the fact that large, national firms have captured an increasing share of overall revenue during the past 20 years in many of these 893 'industries,' they do not, in and of themselves, indicate that the relevant local markets have become more concentrated." We provide empirical evidence supporting the notion that, in the face of rising national concentration, local markets have indeed become, on average, significantly less concentrated.

NOTE:

This research brief is based on Esteban Rossi-Hansberg, Pierre-Daniel Sarte, and Nicholas Trachter, "Diverging Trends in National and Local Concentration," NBER Working Paper no. 25066, September 2018, http://www.nber.org/papers/w25066.

