Mini Review
Volume 12:S3, 2021

Business and Economics Journal

ISSN: 2151-6219

Open Access

Reliance on Major Customers and Product Market Competition: Mini Review and Discussion

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Abstract

The first part of this mini review provides a short summary of the article "Reliance on Major Customers and Product Market Competition", published in Finance Research Letters in January 2021 (Volume 38). The results of the article shed light into the determinants of customer base structure by showing that suppliers increase their sales to major customers when customer industry becomes less competitive. The second part of the review discusses the consequences of the article's findings by linking the main results to the increase in product market consolidation.

Keywords: Customers • Market competition • Products • Reliance

Introduction

A large body of literature has documented that since the beginning of the 21st century product markets have become more concentrated. A handful of "superstar firms" have grown to dominate their industries, and this is not a purely high-tech phenomenon: the increase in concentration has affected around three-quarters of the US industries. The article "Reliance on Major Customers and Product Market Competition", published in Finance Research Letters in January 2021 (Volume 38), analyzes the recent trend in product market concentration through the lenses of supplier-customer relationship. Although customer concentration has grown dramatically over the past several decades, the literature has been largely silent about supplier firms' motives to form a concentrated customer base [1-4].

The main hypothesis of the article is that high levels of product market concentration in the customer industry is one important factor that can encourage supplier firms to establish new relationship with major customers and enhance existing ones. There are several reasons for why this may be the case. First, concentrated market environment is typically less volatile. As a result, a supplier that works with customers that operate in concentrated markets also faces lower risk, even the reliance on major customers is high. Second, barriers to entry can prevent supplier firms from entering the customer industry directly. As a result, suppliers may be more likely to establish relationship with corporate customers rather than engage in retail in the customer's industry. Third, a supplier firm may choose to rely more on major customers to mitigate customer-specific investment needs. Customer firms often require that the supplier undertake investment aimed to tailor the product to the customer's needs. Firms operating in concentrated markets usually have more heterogeneous output, increasing the likelihood that the supplier will be asked to undertake customer-specific investment. Finally, the supplier's ability to diversify across multiple customers is limited when the number of industry players is small. In summary, an increase in product market concentration of customer industries should be associated with stronger reliance of supplier firms on major customers [5-8].

To test the validity of this argument, the article utilizes the sample of publicly-traded firms in Compustat (excluding financial and utilities sectors) over 1976-2016 period. Using this sample, we calculate Herfindahl-Hirshman Index (HHI) of concentration as the sum of squared market shares of individual firms in the NAICS 3-digit industry. To measure the reliance on major customers, we merge the main sample with Compustat Customer Segment Files. Based on the resulting customer-supplier universe, we compute our main dependent variable-the reliance on major customers as the fraction of sales to all major customers out of total sales of a supplier in a given year. One advantage of this metric is that it is not affected by mergers between two existing customers of a given supplier, which would mechanically increase customer concentration. The main independent variable is the HHI of customer's industry. In the instances in which a supplier works with several customers, the measure is weighted by the fraction of sales to each customer out of total sales to all major customer [1].

In our main empirical analysis we estimate the reliance on major customers as a function of customer industry concentration, as well as a standard vector of firm-level controls, such as size, M/B, profitability, as well as firm and year fixed effects. The results demonstrate that the relation between sales-weighted customer industry HHI and the fraction of sales to major customers is positive and economically and statistically significant. The results are also robust to alternative explanations. For example, we find that the impact of customer concentration remains pronounced and statistically significant after including lagged fraction of sales to major customers, supplier industry HHI, and acquisition of activity of the supplier firm. We also consider reverse causality argument and show additional evidence that suggests that the strategic response channel goes from customers to suppliers, and not vice versa.

Product Market Consolidation and Supply-Chain Structure

What are the supply-chain consequences of product market consolidation? Do industries along the supply chain consolidate at the same pace? Could the recent trend of product market consolidation be reflected in higher fraction of sales to major customers? In this section we would like to present the key channels of product market consolidation, offered by the existing literature and discuss their relevance to supplier versus customer industries, as well as to the structure of a firm's customer base.

Grullon, Larkin and Michaely argue that the increased concentration could be an outcome of a unique combination of lax enforcement of antitrust laws in the US and technological innovation. Since the late 1800s, the U.S. government has approved a series of laws to promote competition by outlawing monopolistic practices. Legal scholars have pointed out that starting with George W. Bush's first administration, antitrust enforcement has declined. Grullon, Larkin and Michaely add to this line of thinking by arguing that antitrust enforcement has remained weak essentially until today. In support of their point, they use enforcement data from both the Department of Justice (DoJ) and

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Received 07 May 2021; **Accepted** 21 May 2021; **Published** 28 May 2021

the Federal Trade Commission (FTC) and examine the number of cases filed by the Department of Justice under Section 2 of the Sherman Act over time. These cases focus on situations in which the government believes firms have gained, or are attempting to gain, excessive market power. The authors find that the number of Section 2 cases has significantly declined over the period 2000-2014. Importantly, the correlation between the product market HHI and the number of Section 2 cases over this time period is strongly negative. This stylized evidence is consistent with the idea that limited antitrust enforcement could incentivize firms to engage in merger and acquisition activity (M&As), creating barriers to entry which, in turn, have reduced competition [9-11].

The second plausible explanation is technological changes, which could have created economies of scale. Public adoption of the Internet in mid 1990s, as well as popularization of personal computer around the same time, has made the implication of the computer age on productivity and growth especially strong. The more recent developments in the areas of Artificial Intelligence (AI) technologies are further consistent with the economies of scale argument. For example, Babina, Fedyk, He and Hodson show that AI investment is more pronounced among large firms, who also derive higher benefits from its implementation due to data access. Therefore, if technology and technology-related innovations are better developed and implemented among large firms, the recent technological advances could essentially create barriers of entry to new firms, increasing the incentives of technological start-ups to exit through M&As rather than organic growth [12].

It is further possible that the role of both channels has been more pronounced among customer, rather than supplier, industries. The introduction of new computer and Internet-related technologies, operating based on network effects, has led to the rise of "superstar" firms, characterized by "winner takes it all" features. If customer-dominant industries possess better knowledge and experience interacting with retail consumers, they could be also better positioned to exploit these technological advancements, generate network effects, and become "superstar" firms. As a result, they will consolidate at a faster pace. Economies of scale could be also less applicable to intermediate, or commodity-type, outputs compared to the final consumer-oriented products, since the latter group has a higher portion of an intangible component (e.g., familiarity, strong brand, technological features, etc.), which, once developed, can be easily scalable. In this case, customer firms could also benefit more from industry consolidation than the supplier firms. Finally, the antitrust channel could create also benefit customers more than the suppliers. The reason for that is that customer concentration is negatively related to firm size and suppliers with concentrated customer base tend to be smaller firms. If customer-oriented, or downstream, industries are dominated by larger firms, they are more likely to benefit from lax antitrust regime and engage in barriers-creating merger and acquisition activity [13].

Discussion

The discussion of the reasons behind product market consolidation and the asymmetric response of various industries along the supply chain can next be tied to the main findings of the article summarized in this review. Specifically, it can provide an explanation as to why the reliance on major customers has increased dramatically over the past few decades. A large portion of the increase in the fraction of sales to major customers, documented in previous studies, has coincided with the increase in product market consolidation. If customer industries have been consolidated at a faster pace than the supplier industries, the increased concentration of customer product markets could have encouraged supplier firms to establish new relationship with major customers and enhance existing ones [14].

Conclusion

In summary, the findings of the article reviewed here provide new implications of the recently documented industry-wide increase in product market concentration and suggest that increased reliance on major customers could be another consequence of the trend.

References

1. Gutiérrez, Germán and Thomas Philippon. "Declining Competition and Investment in the U.S.", November (2017).
2. Grullon, Gustavo, Yelena Larkin and Roni Michaely. 2019. "Are U.S. Industries Becoming More Concentrated?" *Rev Financ* 23(2019): 697-743.
3. Patatoukas, Panos "Customer-Base Concentration: Implications for Firm Performance and Capital Markets." *Acct Rev* 87(2012): 363-392.
4. Irvine, Paul, Shawn Saeyeul Park and Çelim Yıldızhan. "Customer-Base Concentration, Profitability, and the Relationship Life Cycle." *Acct Rev* 91(2016): 883-906.
5. Hotelling, Harold. "Stability in Competition". *Econ J* 39(1929): 41-57.
6. Chamberlin, Edward Hastings. "The Theory of Monopolistic Competition". *Harvard University Press,* (1933).
7. Hoberg, Gerard and Gordon Phillips. "Text-Based Network Industries and Endogenous Product Differentiation" *J Politicl Econ* 124(2016): 1423–1465.
8. Campello, Murillo and Janet Gao. "Customer Concentration and Loan Contract Terms." *J Financ Econ* 123(2017): 108-136.
9. Harty, Ronan P, Howard Shelanski and Jesse Solomon. "Merger Enforcement Across Political Administrations in the United States." *Concurrences Competition Law Journal* 2(2012): 1-9.
10. Spitzer, Eliot. "Government's Place in the Market", *The MIT Press,* (2011).
11. Crane, Daniel A. "Has the Obama Justice Department Reinvigorated Antitrust Enforcement?" *Stanford Law Review Online* 65(2012): 13-20.
12. Babina, Tania, Anastassia Fedyk, Alex Xi He and James Hodson. "Artificial Intelligence, Firm Growth, and Industry Concentration". November 20, (2021).
13. Autor, David, David Dorn, Lawrence F. Katz and Christina Patterson et al. "The Fall of the Labor Share and the Rise of Superstar Firms.", May 15, (2017).
14. Larkin, Yelena. "Reliance on Major Customers and Product Market Competition". *Financ Res Letters* 38(2021): 101436.6.

How to cite this article: Larkin, Yelena. "Reliance on Major Customers and Product Market Competition: Mini Review and Discussion." *Bus Econ J* 12 (2021) 002.