Comments on "A Portrait of US Factoryless Goods Producers by: Fariha Kamal

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1 Overview and contribution

"A Portrait of US Factoryless Goods Producers", by Fariha Kamal makes an interesting contribution to the growing body of evidence on firms that do not perform physical transformation activities, but are nevertheless broadly involved in the manufacturing of goods. These firms are important to understand because they show how traditional measures of manufacturing activity based on production workers may miss important parts of the overall production process. Moreover, factoryless goods producers (FGPs) seem to be innovation-intensive when compared to other firms, which suggests that their activities are likely to have important implications for growth and productivity.

Kamal (forthcoming) adds to existing work on FGPs by combining a number of micro-level datasets on employment, R&D, patenting, and trademarking with new

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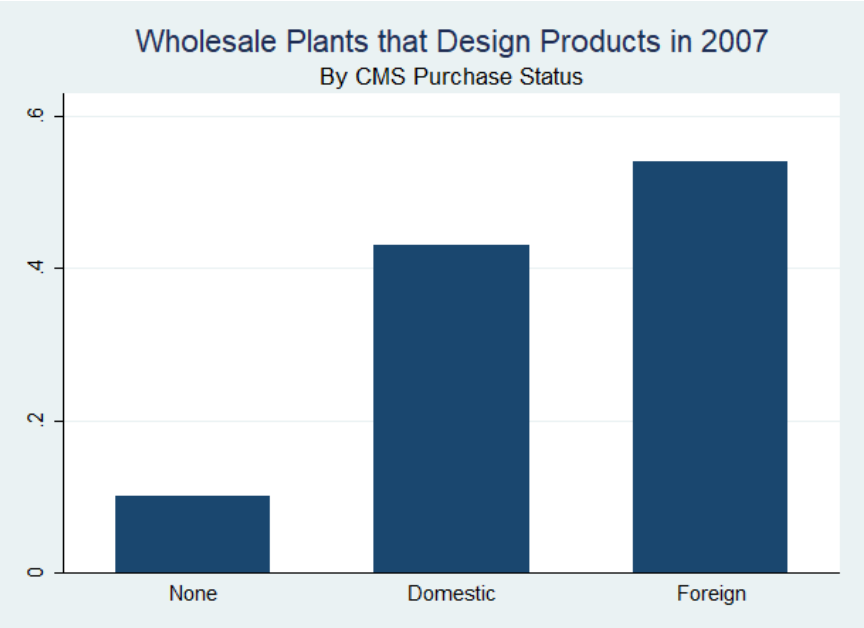
datasources for identifying FGPs. This work leads to two significant contributions. First, she assesses the extent of FGP firms outside of manufacturing and wholesale. Second, she can measure the extent to which FGP activity is tied to standard measures of innovation, such as patenting and R&D expenditure.

There are two particularly interesting results in Kamal (forthcoming). First, Kamal finds that FGPs' workforce composition is skewed towards workers in headquarter establishments. This is similar to Bernard and Fort (2015) who find that FGP wholesale firms have an average of three times as much management and professional and technical services employment as non-FGP wholesale firms. Finding these results outside of the wholesale sector is suggestive of an important role for FGPs in the growth of professional and technical services employment in the US. It also raises a number of potentially interesting venues for future work. Do FGP firms have foreign production facilities with which these professional and technical services employees interact? Are FGPs associated with a growth of outsourcing of manufacturing as firms specialize in the innovation part of the production process?

Second, Kamal finds that FGPs perform considerably more innovation than non-FGP firms. For instance, her results show that FGP firms spend four to seven times more on R&D expenditures compared to non-FGP firms. FGPs also patent and trademark more than non-FGP firms. Given the importance of innovation for long-term growth, these results are particularly interesting. They resonate with findings in Bernard and Fort (2013) where we find that wholesale firms that purchase contract manufacturing services (CMS) are more likely to design the goods they sell. Figure 1 shows that while less than ten percent of wholesale plants that do not purchase CMS design their products, about 40 percent of plants that purchase domestic CMS do so, and over 50 percent of plants that purchase CMS from foreign countries to do. An interesting and related question for future work is to assess the extent to which the ability to leverage

Figure 1: 2007 share of wholesales plants that design their products, contract manufacturing purchase status. Source is 2007 Census of Wholesale trade.



low-cost production opportunities in foreign countries has increased US innovation. Kamal's work on FGPs provides strong evidence that any answer to this question must examine not only the innovative decisions of US manufacturers, but also non-manufacturing FGP firms.

2 Comments

In this section, I describe two important considerations for interpreting the results of the paper. First, I discuss the likely role of industry compositional differences. Second, I describe the role of sample selection. Finally, I conclude by discussing interesting potential avenues for future work raised by this paper.

Industry compositional differences may drive the results. For instance, if FGPs are

concentrated in semi-conductor manufacturing-related activities, as studied by Bayard et al. (2015), then it is likely not meaningful to compare them to firms in other sectors, such as Walmart.

These compositional differences are likely quite important. For example, Bernard and Fort (2015) find that wholesale FGP firms' imports are highly concentrated in two sectors: electrical machinery and equipment and machinery (HS2 product codes 84 and 85). These two sectors comprise 40 percent of wholesale FGP firms imports, but only 30 percent of non-FGP wholesale firms' imports. While this comparison is limited to wholesale, the possibility of compositional factors driving results becomes more severe when comparing wholesale FGP firms to retail or other sector non-FGP firms. This is highlighted by the fact that Kamal finds that the share of imports over sales is three times higher at FGP firms compared to non-FGPs. In contrast, Bernard and Fort (2015) find that within the wholesale sector, FGP firms import just 38 percent of sales compared to non-FGPs that import 86 percent. Kamal's finding that FGP firms are smaller than non-FGPs is also reversed when comparing FGP wholesale firms to non-FGP wholesale firms. Bernard and Fort (2015) find that FGPs are about twice the size of non-FGPs. In additional results, we found these differences persisted when controlling for industry differences.

Another important consideration when analyzing the results from this paper is the role of selection into the sample. In Fort (2017), I show that there is considerable selection into the special inquiries data, both in terms of which establishments were asked the question, and conditional on being asked, which establishments responded to the question. Table 1 shows that establishments in the 2007 Census of Manufactures (CM) that responded to the special inquiry question had an average of 86 employees and $37 million in sales, while plants that were asked but did not answer the question had 77 employees and only $30 million in sales. A further 25 percent of plants were not

Table 1: Plant Shares and Characteristics by Response Status

	Participation Shares			Means		
	Plants	Sales	Emp	Sales (000s)	Emp	ln(VAP)
In CMS Sample	0.54	0.75	0.71	**36,778**	**86**	**4.56**
Out of CMS Sample						
Not Answered	0.21	0.23	0.24	**29,548**	**77**	**4.61**
Not Asked	0.25	0.02	0.05	2,314	13	4.25
No Info	0.00	0.00	0.00	21,147	61	4.75
All Manufactures	1.00	1.00	1.00	26,638	66	4.50

Notes: 2007 Special inquiries data for the Census of Manufactures. Excludes administrative records. CMS questions only asked on CMF long form.

asked the question at all, and these plants are considerably different. The non-asked establishments had just 13 employees and $2 million in sales.

The role of selection will be even more severe when analyzing the Company Organization Survey, as that survey is geared towards large, multi-establishment firms. Specifically, it covers all large firms (multi-establishment firms with 250 or more employees) and smaller companies that appear to be expanding to multiple establishments. Assessments about the relative size or other activities of FGP versus non-FGP firms may thus be different when considering the universe of US firms instead of the selected sample of large firms for which CMS data are available. It is also possible that the share of aggregate FGP activity will be overstated if larger firms are more likely to be FGPs and those are disproportionately represented in the samples.

Overall, this is an interesting new paper on factoryless goods producers that takes a first stab at expanding the analysis beyond the manufacturing and wholesale sectors. By exploiting the new data constructed by Kamal, we can hope to learn more about the sectoral composition of FGP firms, and about how FGPs differ from other firms in their industry.

References

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