

Monetary policy, labor market, and sectoral heterogeneity

Online Appendix

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A Summary statistics

Table A-1 presents summary statistics of the labor market variables used in our empirical analysis. As seen from the table, small and large firms in the three sectors, service, manufacturing, and construction, have distinctly different growth rates (median) for all the variables considered in our empirical analysis. In the service sector, the growth rates are positive for both small and large firms for employment growth and hiring growth, while they are negative in the manufacturing sector. For construction, the growth rates for employment are positive for both small and large firms, but while they are positive for the hiring growth of large firms, hiring growth is negative for small firms.

Table A-1: Summary statistics of labor market variables in Services, Manufacturing (Mfct.) and Construction (Constr.) sectors

Variable	Industry	All size firms				Small (size 1) firms				Large (size 5) firms			
		All	Services	Mfct.	Constr.	All	Services	Mfct.	Constr.	All	Services	Mfct.	Constr.
Employment	mean	1.08	1.90	-1.53	0.81	0.68	1.42	-1.15	0.18	1.86	2.83	-1.79	2.97
	median	1.46	2.18	-0.75	1.65	0.75	1.44	-0.74	1.50	1.78	2.74	-1.13	3.39
	st. dev.	6.05	5.59	4.74	7.63	11.15	11.76	5.92	7.63	12.05	12.70	5.97	16.20
Hiring	mean	-0.86	-0.19	-3.94	-1.29	-1.32	-0.45	-3.81	-1.88	0.08	0.62	-3.61	1.04
	median	0.61	1.10	-1.55	0.17	-0.78	0.048	-3.09	-0.65	1.48	1.76	-1.99	0.76
	st. dev.	20.78	15.67	19.37	13.16	20.45	19.88	13.35	12.65	33.09	27.21	30.11	28.65

Notes: The table reports mean, median, and the standard deviation of the annual growth rates of seasonally adjusted series of employment and hiring growth in all firms, small firms and large firms in the entire sample, Services, Manufacturing (Mfct.) and Construction (Constr.).

B Additional results

We now present additional results from our empirical analysis. We first present the results where we compare the impulse response functions of the manufacturing sector with the service sector. We find that that an increase in the target shock results in lower employment and hiring growth, as seen in the top left panels of Figures [A-1](#) and [A-2](#). We also find that firms in the manufacturing sector respond more compared to firms in the service sector. As seen from these figures, this result also holds when we compare firms of different size within sectors; for both large and small firms, firms in the manufacturing sectors are more responsive to target shocks compared to firms in the service sector. Moreover, these figures highlight that small firms within a sector react more to target shocks than large firms. The difference across firm size is not as pronounced in the service sector as it is in the manufacturing sector. Therefore, our results suggest that the response of the service sector to monetary policy does not vary by firm size as much as it does for firms in manufacturing.

Our results, suggest that if the effect of positive/negative target shocks are not examined separately, it is easy to conclude that large firms react less to monetary policy compared to small firms. However, if one does separate the effect of positive target shock from that of negative target shock, as seen in Figures 1 and 2 in the main text, and also seen in Figure [A-3](#), within each sector it is large firms that respond more than small firms to a positive (tightening) target shock while they respond less to a negative (expansionary) target shock, as also found in SSZ. In addition, the bottom panels of Figures 1 and 2 in the main text, and Figure [A-3](#) show that within each sector, the difference across firm size is heterogeneous across sectors. In the bottom panels of Figures 1 and 2, and [A-3](#) we see that the difference between large and small firms is more pronounced for firms in manufacturing than in services.

Similar results hold when comparing the response of firms in the construction sector with the firms in the service sector, as seen in Figures [A-4—A-7](#).

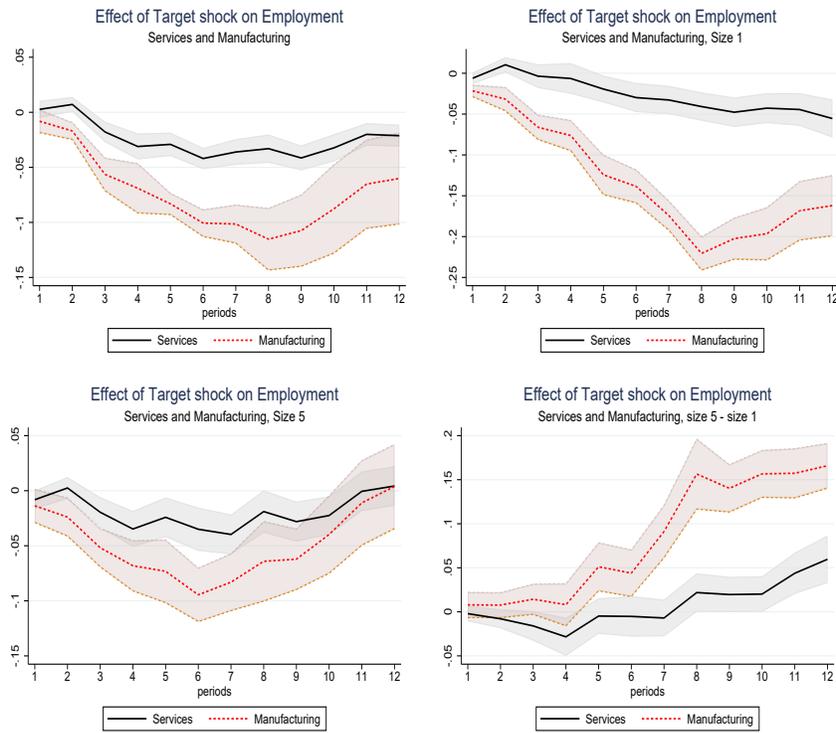


Figure A-1: Response of employment growth to target shocks

Notes: The figure presents the response of employment growth (top left panel) in services (black solid line) and manufacturing (dotted red line) to a target shock. The horizontal axis measures time (in quarters) and the vertical axis measures the response in percent. The shaded area is the 80% confidence bands.

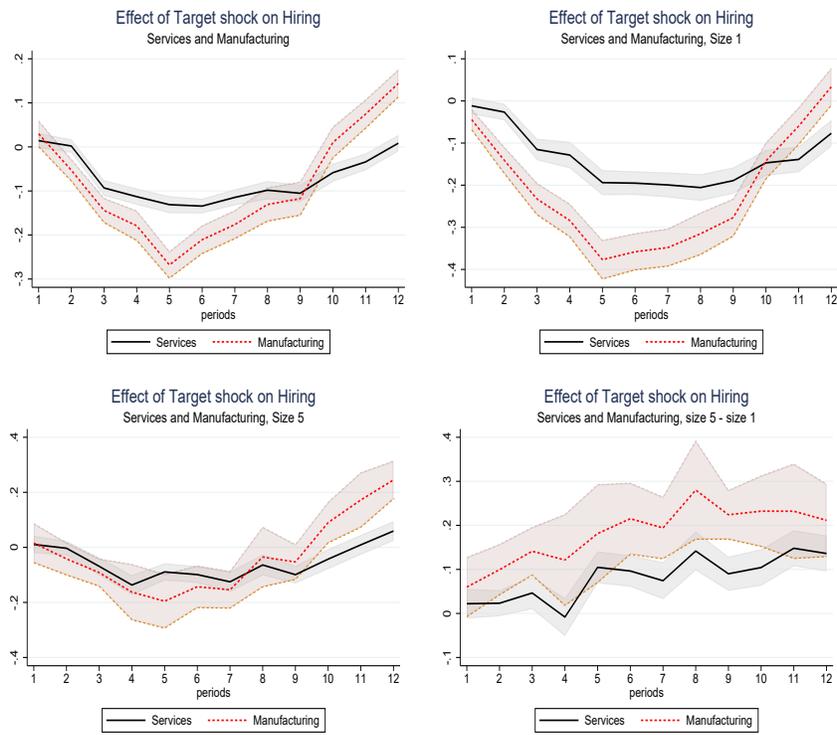


Figure A-2: Response of hiring growth to target shock

Notes: The top panels present the responses to target monetary policy shocks of hiring growth of small (left panel) and large (right panel) firms in services (black solid line) and manufacturing (dotted red line). The bottom panel presents the difference in responses between large and small firms. The horizontal axis measures time (in quarters) and the vertical axis measures the response in percent. The shaded area is the 80% confidence bands.

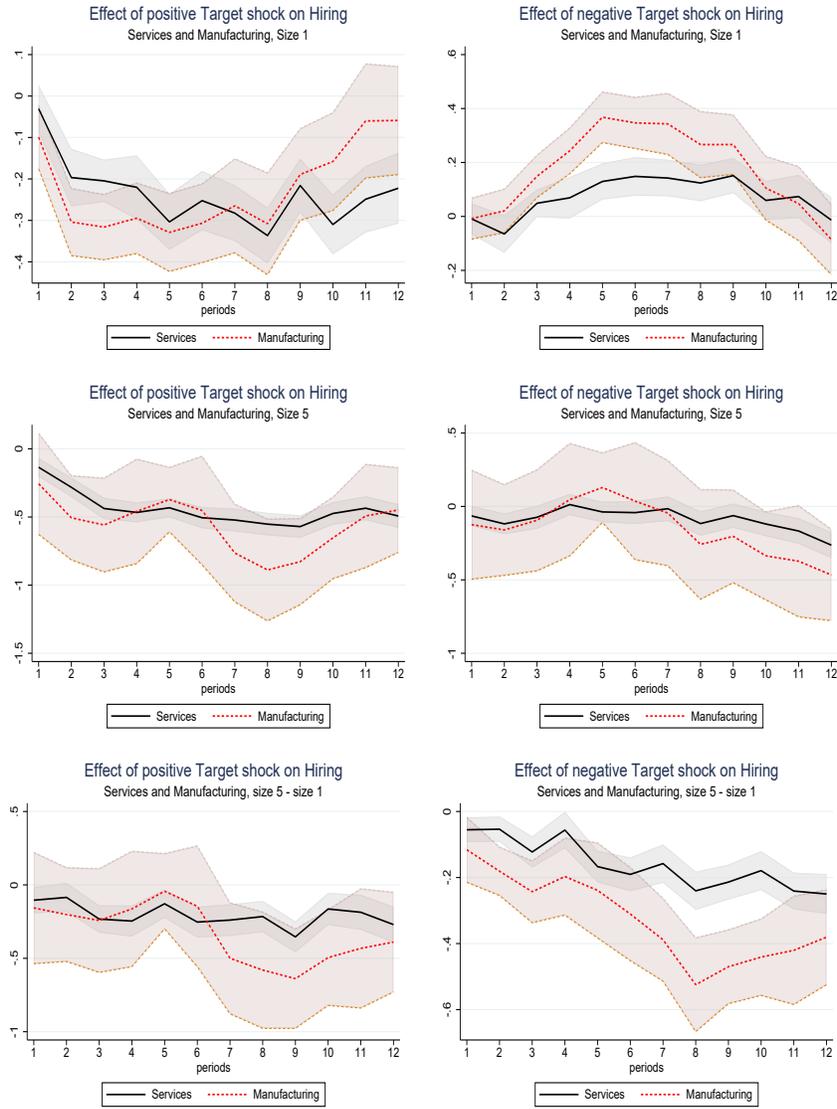


Figure A-3: Response of hiring growth to positive and negative target shock

Notes: The top panels present the responses to positive (left) and negative (right) target shocks of hiring growth of small (top panel) and large (middle panel) firms in services (black solid line) and manufacturing (dotted red line). The bottom panel presents the difference in responses between large and small firms. The horizontal axis measures time (in quarters) and the vertical axis measures the response in percent. The shaded area is the 80% confidence bands.

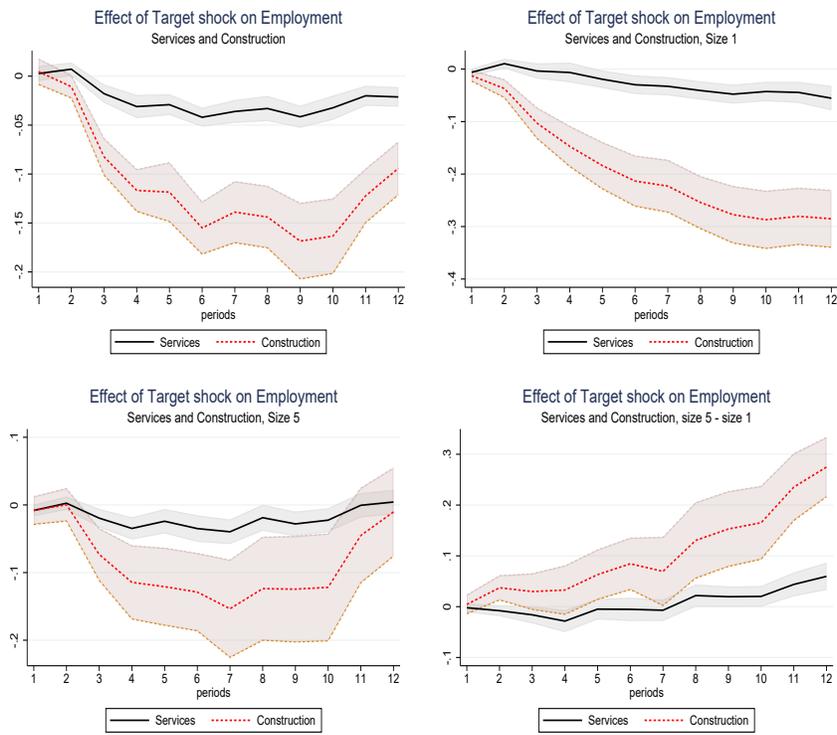


Figure A-4: Response of employment growth to target shock in service and construction sectors

Notes: The top panels present the responses to target monetary policy shocks of employment growth of small (left panel) and large (right panel) firms in services (black solid line) and construction (dotted red line). The bottom panel presents the difference in responses between large and small firms. The horizontal axis measures time (in quarters) and the vertical axis measures the response in percent. The shaded area is the 80% confidence bands.

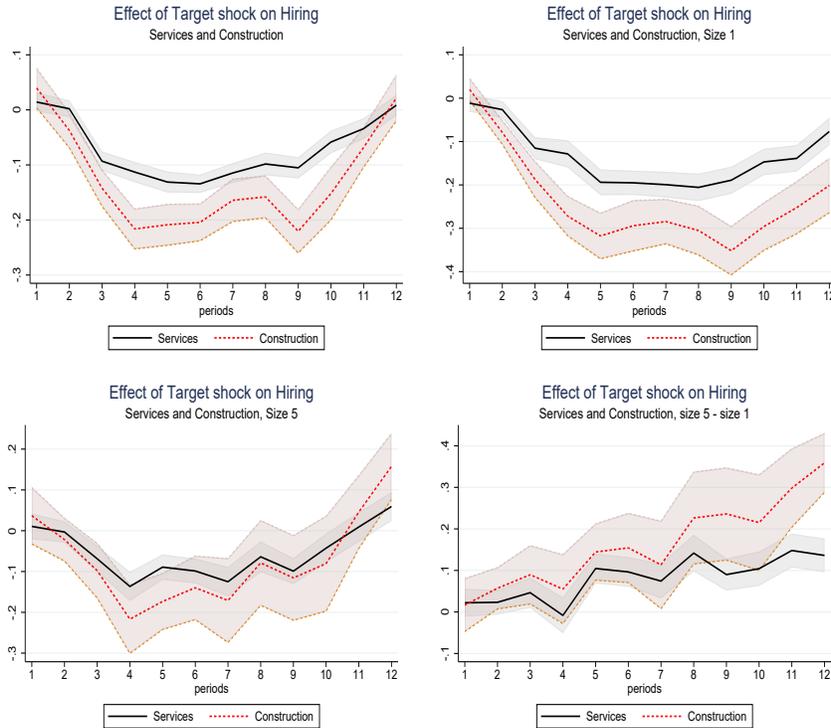


Figure A-5: Response of hiring growth to target shock in service and construction sectors

Notes: The top panels present the responses to target monetary policy shocks of hiring growth of small (left panel) and large (right panel) firms in services (black solid line) and construction (dotted red line). The bottom panel presents the difference in responses between large and small firms. The horizontal axis measures time (in quarters) and the vertical axis measures the response in percent. The shaded area is the 80% confidence bands.

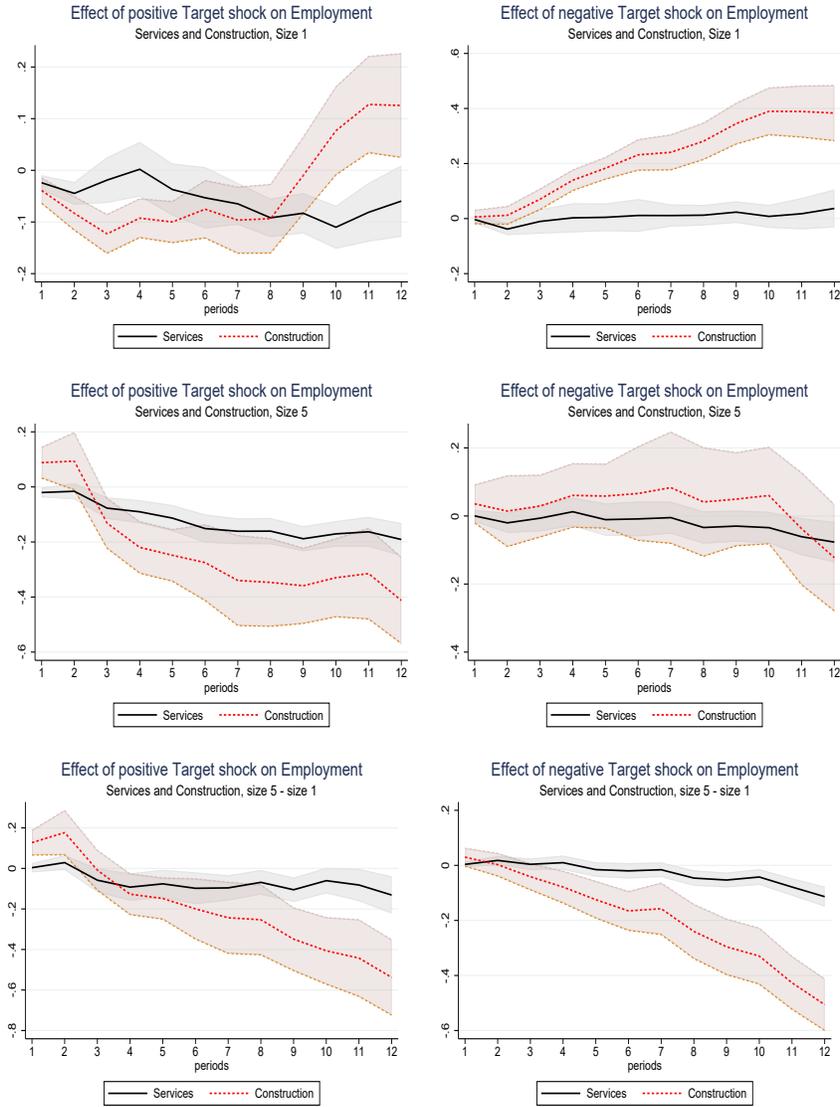


Figure A-6: Response of employment growth to positive and negative target shock in service and construction sectors

Notes: The top panels present the responses to positive (left) and negative (right) target shocks of employment growth of small (top panel) and large (middle panel) firms in services (black solid line) and construction (dotted red line). The bottom panel presents the difference in responses between large and small firms. The horizontal axis measures time (in quarters) and the vertical axis measures the response in percent. The shaded area is the 80% confidence bands.

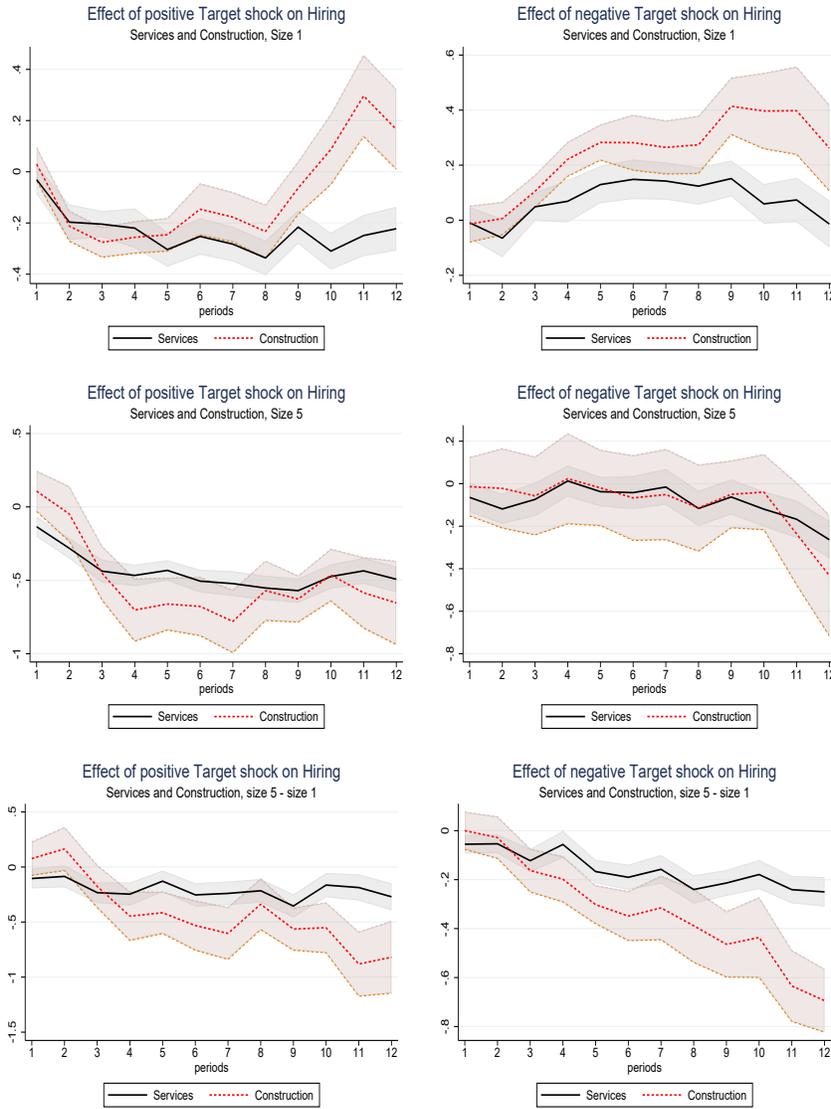


Figure A-7: Response of hiring growth to positive and negative target shock in the construction and services sectors

Notes: The top panels present the responses to positive (left) and negative (right) target shocks of hiring growth of small (top panel) and large (middle panel) firms in services (black solid line) and construction (dotted red line). The bottom panel presents the difference in responses between large and small firms. The horizontal axis measures time (in quarters) and the vertical axis measures the response in percent. The shaded area is the 80% confidence bands.