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Are foreign private equity buyouts bad for workers?

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ABSTRACT

The media often cast foreign private equity firms as villains who gamble with local jobs. We use detailed registry data from Sweden to show that foreign buyouts have not affected workers' labor market outcomes. But domestic buyouts have. They have increased unemployment incidence by a fifth, duration by a third, and lowered labor income by seven percent.

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1. Introduction

Acquisitions by foreign private equity (PE) firms are common. Baziki et al. (2017) report that more than eight percent of all crossborder acquisitions between 1998 and 2010 were by financial buyers. The media and politicians often cast foreign PE firms as villains who gamble with local jobs. For example, the head of the German Social Democratic Party, Franz Müntefering, called PE firms "swarms of locusts" who "descend on companies, graze, and then move on" (Bena et al., 2017). There are reasons to expect that foreign PE firms could be more aggressive towards workers than domestic PE firms. Foreign PE firms have no local reputation to care for, and they may specialize in foreign rather than domestic expansion. But there are also reasons to expect that domestic buyouts could be bad for workers. Domestic PE firms might have superior knowledge on how to circumvent local labor market regulations to cut costs. They might also pursue a strategy of market consolidation and thus merge local firms with overlapping assets and workers.

In this article, we use Swedish matched employer-employee data to study the labor market outcomes of workers following foreign and domestic buyouts. We follow workers for nine years around the buyout and compare them to workers in similar firms that are not buyout targets. We show using differences-in-

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differences (DiD) regressions that foreign buyouts have not affected unemployment incidence, duration, or annual labor income of workers. But domestic buyouts have. They have increased unemployment incidence by a fifth, duration by a third, and lowered labor income by seven percent. Triple difference models show statistically significant relative differences in unemployment incidence and annual labor income, but not in unemployment duration.

The literature on the employment effects of buyouts has found mixed effects on net employment at the firm level. There is growth following buyouts in France (Boucly et al., 2011), and small declines or no effects following buyouts in the U.K. and the U.S. (Kaplan, 1989; Lichtenberg and Siegel, 1990; Muscarella and Vetsuypens, 1990; Wright et al., 1992; Amess and Wright, 2010; Davis et al., 2014). At the individual level, Agrawal and Tambe (2016) document positive effects on IT related workers in the US; Antoni et al. (2017) find mixed effects on workers in Germany; and Olsson and Tåg (2017) show that workers performing routine or offshorable job tasks in low productive firms tend to get laid off. These papers do not distinguish between the foreign status of the PE firm. Baziki et al. (2017) investigate theoretically the determinants of strategic buyers versus financial buyers in cross-border acquisitions, and Guery et al. (2017) use French data to show that establishmentlevel employment is lower following buyouts by foreigners compared to buyouts by French PE firms.

Our paper builds on and uses the same dataset as Olsson and Tåg (2017) and is the first to investigate the effects of PE buyouts on workers using individual-level data and separating by foreign

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Table 1 Industry distribution.

Industry	Firms		Workers		
	Foreign	Domestic	Foreign	Domestic	
Manufacturing	36	125	6048	12262	
Wholesale and Repair	23	67	2335	7320	
Transport, Mail, and Telecommunications	8	5	626	547	
Real estate, Renting, and Business activities	14	49	1676	3380	
Education, Health and Social Work	32	13	11366	1043	
Other (Construction, Financials, Hotels and restaurants)	2	35	66	4560	
Total	115	294	22,117	29,112	

Table 2
Regression results.

LHS variable Sample	Unemployment incidence			Unemployment days			Log labor income		
	Foreign	Domestic	Both	Foreign	Domestic	Both	Foreign	Domestic	Both
Post x Buyout	-0.010 (0.010)	0.016*** (0.006)	0.016*** (0.006)	-0.133 (1.403)	2.092** (0.841)	2.107** (0.853)	0.100 (0.078)	-0.069* (0.037)	-0.069* (0.036)
Buyout	0.005 (0.008)	-0.006** (0.003)	-0.007** (0.003)	0.503 (1.093)	-0.788* (0.452)	-0.831* (0.426)	-0.080 (0.078)	0.024 (0.027)	0.033 (0.260)
Post	0.032*** (0.008)	-0.001 (0.006)	0.008 (0.010)	5.482*** (1.117)	1.716** (0.799)	2.911*** (0.770)	-0.294*** (0.054)	-0.125*** (0.030)	-0.177*** (0.032)
DiDiD			-0.026** (0.012)			-2.150 (1.667)			0.165* (0.090)
Percent change	-8.9%	22.3%	-28.8%	-1.3%	31.7%	-26.3%	-	-	-
Worker-year obs.	325,229	421,667	756,896	325,229	421,667	756,896	325,229	421,667	756,896

This table reports selected coefficients and their standard errors (in parentheses) from nine different regressions. The regressions run on the *Foreign* and *Domestic* subsamples are difference-in-differences regressions, whereas the regressions on the combined sample (Both) are triple-difference regressions. Unemployment incidence is a dummy taking the value of one for workers with at least one day of unemployment during a year. "Post" is a dummy taking the value of one during the year of the buyout announcement and all years after. "Buyout" is a dummy taking the value of one for workers employed in targeted firms at time t = 0. "Post x Buyout" is the difference-in-differences estimate and "DiDiD" refers to the triple difference coefficient. The regressions cover nine years, including four pre-periods, four post-periods, and the year of the buyout announcement. The model includes the same set of control variables as the normalized means in Fig. 1. The percentage change is the relevant coefficient divided by the average LHS variable for treated workers in the pre-period. The standard errors are clustered at the corporate group times municipality level.

status. Firm-level studies provide insights on net employment changes. But there is little evidence on what happens to employed workers. This is because zero net effects could hide considerable churn. Our paper thus is the first to speak directly to the concerns about existing workers expressed by politicians and the media.

2. Data and empirical strategy

This article uses the same data, empirical strategy, and samples as Olsson and Tåg (2017). The data comes from Sweden, which has one of the most active PE markets in Europe (Lerner et al., 2008). We use data from Statistics Sweden, the Swedish Companies Registrations Office, and on buyouts undertaken between 2002 and 2008 in Sweden from the Capital IQ database and Bergström et al. (2007).

To deal with selection concerns, we use propensity score matching combined with DiD regressions. Matching gives us a control group of workers in firms that look like the firms that are buyout targets. The DiD design controls for unobserved time-invariant group effects and common time effects. We match PE target firms to control firms using one-to-one matching without replacement. Olsson and Tåg (2017) detail the matching procedure and how well it works (we use the same set of controls).

3. Analysis and results

Table 1 displays the distribution of buyouts by foreign status across industries. Foreign buyouts are more common in the transport, mail, and telecommunications industry as well as in the education, health, and social work sector. In unreported unconditional mean comparisons, we found that foreign PE firms tend

to target firms that are larger, younger, has lower leverage, has fewer routine workers, fewer offshorable workers, and that has more skilled workers. There are no observable differences in value added per employee, return on assets, or prior size growth.

Fig. 1 shows trends in unemployment and annual labor income of workers around the buyout announcement. Because all workers work at time zero, the pre-trends are decreasing in unemployment and increasing in labor income. But key is that the pre-trends for the treated workers resemble those of the control workers for all outcomes

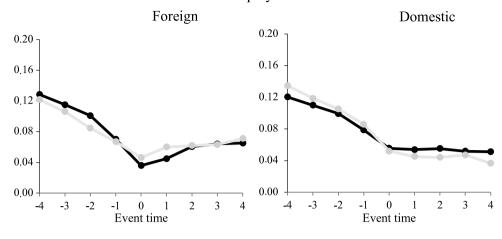
After the buyout announcement, unemployment is higher and labor income lower for the treated workers part of domestic buyouts relative to their controls. This is not the case for workers that are part of foreign buyouts.

Table 2 displays the output from nine regressions that confirm this visual pattern. There are no statistically significant effects in the foreign subsample (Columns 1, 4, and 7). But there are effects in the domestic subsample. Domestic buyouts appear to have increased unemployment incidence by a fifth, duration by a third, and lowered labor income by seven percent (Columns 2, 5, and 8). The triple difference estimate (DiDiD) in Columns 3, 6, and 9 show statistically significant relative differences in unemployment incidence and annual labor income, but not in unemployment duration.

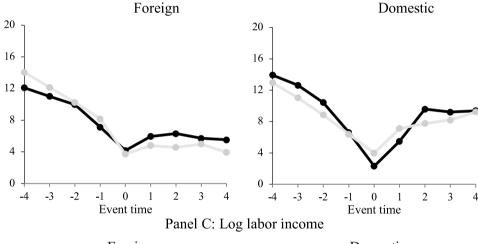
4. Concluding remarks

This article uses detailed registry data from Sweden to show that foreign buyouts have not affected workers' labor market outcomes. But domestic buyouts have increased unemployment incidence by a fifth, duration by a third, and lowered labor income by

Panel A: Unemployment incidence



Panel B: Unemployment days



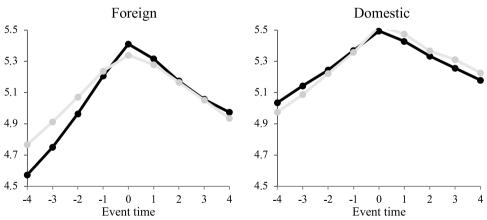


Fig. 1. Trends in unemployment and labor income. These figures display annual trends around the buyout event at year zero on the *x*-axis. The black lines are for treated workers and the gray for control workers. The trends on the *y*-axis are estimated group-time effects from a regression that omits the constant and includes a set of control variables. The individual controls measured at t=0 are age, age squared, gender, labor income, education fixed effects, and tenure. We also control for match-specific dummies and five unemployment incidence dummies at time t=0, t=-1, t=-2, t=-3, and t=-4. We also include firm controls measured at t=0: size, size squared, size growth from t=-1 to t=0, firm age, firm age squared, and county fixed effects. Variable descriptions are available in Olsson and Tág (2017).

seven percent. These results do not lend support to the narrative that foreign PE firms destroy local jobs.

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