Multinational Firms and Entrepreneurship*

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Abstract

Does globalization hinder entrepreneurship? This paper examines how the entry of foreign multinational corporations (MNCs) affects the formation and performance of new firms in the technology sector. Using comprehensive administrative data from Israel covering all firms and workers in the tech industry between 2005 and 2018, we find that MNC entry significantly reduces the likelihood that local employees found new startups. At the same time, wages are 15 percent higher at MNCs, and entry raises wages at nearby local firms by 7 percent, suggesting that higher opportunity costs suppress entrepreneurial activity. We also find suggestive evidence that startups founded after MNC entry have higher survival rates, consistent with stronger selection or positive spillovers. Taken together, our results highlight how MNC expansion dampens business dynamism while potentially shifting entrepreneurship toward higher-quality ventures.

1 Introduction

At least since Schumpeter (1942), economists have considered innovation a key driver of economic growth. Fifty years later, Aghion and Howitt (1992) developed the Schumpetrian growth theory, highlighting the role of innovations in replacing older technologies.

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The theory emphasizes the role of entrepreneurs and new firms that grow and drive large incumbent firms out of the market. Business dynamism, defined as the entry, growth, decline, and exit of businesses, is a primary channel that fosters innovation and enables the allocation of resources from less to more innovative firms.[1]

The decline in business dynamism – observed broadly since the 1980s and within the technology sector since the early 2000s (Audretsch et al. (2006); Chodorow-Reich et al. (2023)) – has become a significant concern among economists (e.g., Decker et al. (2020, 2016a,b); Akcigit and Ates (2023)). Understanding the drivers of this decline is critical, as researchers partially attribute the slowdown in aggregate productivity growth over recent decades to these patterns. Simultaneously, the expansion of foreign multinational corporations (MNCs), particularly in the technology sector, has emerged as a major global phenomenon. Multinational firms account for a third of world output and employ about a quarter of the global workforce. In the US, multinationals account for 22 percent of employment, 40 percent of sales, and 65 percent of goods exported (Ahern (2025); Delpeuch et al. (2025); Kamal et al. (2022)).[2] This paper links these two phenomena, providing novel causal evidence that the expansion of MNCs has contributed to the decline in business dynamism within the technology sector. This, in turn, has had potential negative implications for innovation and economic growth.

We focus on the Israeli tech sector to estimate how the entry and expansion of tech MNCs affected the number of new tech firms (startups) and the wages of individuals working in the tech sector. Using administrative tax panel data for all individuals employed in the tech sector and information on the location, entry, and growth of all technological firms between 2005 and 2018, we first show that the number of new startups significantly falls after an MNC begins operating in a given area. In addition, the wages of workers employed by MNCs and surrounding local firms increase. Higher wages paid to workers could explain the drop in the number of start-ups as they reduce the profitability of launching startups by increasing entrepreneurs' opportunity costs and raising the expense of hiring skilled workers.[3] Finally, we present suggestive evidence that startups that were established near MNCs have better survival rates. This latter result could be driven by either selection, where less promising ideas for new start-ups are abandoned, or by positive knowledge and management spillovers created by MNCs.

[1] See work by Decker et al. (2020) and Aghion et al. (2014) on the relationship between faster innovation-led growth and business dynamism.

[2] Already in 2000, the top 1 percent U.S. exporters accounted for 81 percent of U.S. exports (Antràs and Yeaple (2014); Tintelnot (2017))

[3] Consistent with our argument, Nvidia's entry into the Israeli tech industry and the higher wages it provided resulted in a steep decline in the number of startups in the local chip industry. See, in Hebrew, www.themarker.com/technation/2024-01-28/ty-article/.highlight/0000018d-4b9b-d561-a5bd-6f9bdf820000?.

The Israeli tech sector offers an excellent setting for examining the relationship between MNCs and entrepreneurship. This sector is considered a hotbed for worldwide innovation and an important growth engine for the Israeli economy. It employs more than 10 percent of the local workforce and is responsible for about 50 percent of Israeli exports. For many years, Israel has been recognized as a start-up nation, where being an entrepreneur/start-up owner has become a prime example of success in the tech industry and beyond.[4] In our data, roughly 1 percent of tech employees are considered entrepreneurs, i.e., they are one of the top 3 wage earners in a newly established tech firm. In recent years, the number of new startups has been declining, whereas the number of multinational tech firms, typically through R&D centers, has been increasing. During the period 2005-2018, the time frame for our analysis, the share of employees at foreign tech companies more than doubled, increasing from 9.2 percent in 2005 to 19.5 percent in 2018, while the number of employees in the entire tech industry increased by nearly 40 percent. In 2018, more than 400 MNCs operated in the tech sector, including megafirms such as Google, Intel, Amazon, Microsoft, Apple, Nvidia, and Meta.[5] On average, 18 R&D centers were opened every year. The massive expansion of MNCs into Israel and the large number of technological startups provide a unique opportunity to identify and measure the impact of MNCs on entrepreneurship.

The employee-employer administrative tax panel data allows us to follow all individuals employed in the Israeli tech sector between 2005 and 2018. The data includes information on each individual's annual salary, city of residence, and the company where they are employed each year, as well as the employer's address, opening year, number of employees, sub-industry classification, and classification of the company as a local firm or an MNC. We augment these data with rich employee demographic information including age, gender, ethnicity, immigration status, and detailed educational attributes. In the empirical analysis, we exploit geographical and intertemporal variation in MNCs opening and expansion throughout Israel to separately identify and measure their impact on entrepreneurship and the wages of workers in surrounding firms. We follow the literature and identify founders as the top three highest-paid individuals in a newly established firm (Azoulay et al., 2020; Kerr and Kerr, 2016).[6]

Figure 1 illustrates our main findings. The top panel plots the entrepreneurship

[4]Senor and Singer (2011) describe how despite being only 60 years old, with a population of 7 million (at the time), Israel had the most firms of any foreign country appearing on the Nasdaq and captured a significant fraction of global venture capital investment. As of May 2023, there were 98 unicorns operating in Israel, i.e. private technology companies with an estimated value of at least 1 billion dollars (https://www.techaviv.com/unicorns).

[5]See, p.40 in the annual report of the Israeli Innovation Authority (innovationisrael.org.il/document/annual-report-2023-the-state-of-tech-high.)

[6]Our results are robust to alternative definitions of founders, such as the top one (Bernstein et al., 2022), two, or five highest-paid individuals in a new firm.

rate — defined as the probability that an employee in a given year becomes one of the top three earners in a startup founded the following year — in the year before MNC entry, the year of entry, and the year after. MNC entry is defined as the year in which a multinational began operating within a 10-kilometer radius of the employee's workplace. As can be seen, the entrepreneurship rate declines sharply from an average of 1.4 percent in the year before entry to 0.3 percent in the entry year. It shows signs of recovery one year later, but remains well below the pre-entry level.

The bottom panel of Figure 1 shows the relative wage of tech workers in areas experiencing MNC entry, with the wage distribution benchmarked against workers not exposed to entry. Their wage percentile rises from the 64th percentile to the 68th percentile in the year of MNC entry, and further to the 70th percentile in subsequent years.

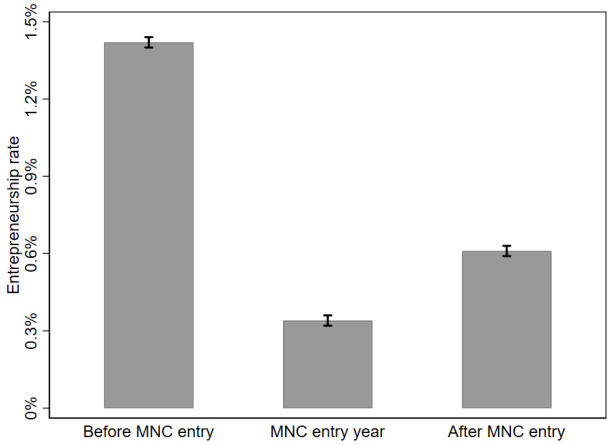
When we run an event-study specification that estimates entrepreneurship dynamics in the four years leading up to MNC entry and the four years following it, we again find patterns consistent with the raw data in Figure 1. Specifically, after including both city and individual fixed effects, the probability that a worker becomes an entrepreneur drops by 1.5 percentage points sharply in the year of entry. This drop implies a near-collapse of local entrepreneurship at the year of entry. The negative effect remains significant in the following years, though its magnitude decreases substantially.

To further test the robustness of our findings, we construct a matched sample of workers and estimate a dynamic difference-in-differences model. We match treated and untreated workers using a propensity score strategy based on age, field of study, type of academic institution attended, number of high school matriculation units in math, and pre-entry wages. This approach ensures that we compare similar-on-observables workers with different levels of exposure to MNC entry. Using this sample, we estimate dynamic treatment effects over four years both before and after entry. The results confirm our baseline findings: MNC entry nearly eliminates the likelihood of entrepreneurship in the year of entry. The negative effect weakens but remains sizable and statistically significant in subsequent years.

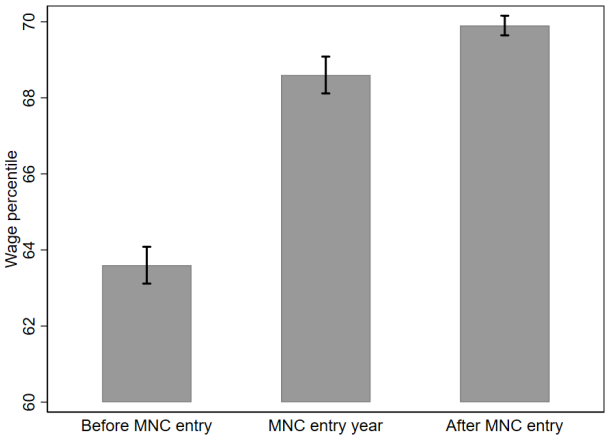
We use the same dynamic difference-in-differences methodology to estimate the impact of MNC entrance on wages and find a significant 4-8 percent increase in local wages after MNC entry. Moreover, the estimated pre-trends are relatively flat, providing support for the parallel trends assumption. We attribute these wage effects to positive spillovers from MNCs to local firms, likely due to competition for skilled workers. These higher wages can provide a potential explain why fewer new firms are established after MNCs enter a market. Higher wages directly affect the potential entrepreneur's outside options and could encourage her to remain at her current firm. The costs of high-skilled labor also account for a significant share of the cost of a new start-up. Thus, one would

Figure 1: Entrepreneurship and Wages Surrounding MNC Entry

Panel A: Entrepreneurship Rate



Panel B: Wage Percentile



Notes: Panel A presents entrepreneurship rates, defined as the likelihood that an employee in a given year will be one of the top 3 earners in a firm founded in the following year, among workers in areas where MNCs began operating, in the pre-entry year (1.4 percent), the entry year (0.3 percent), and the year after (0.6 percent). Panel B presents the wage percentile of workers exposed to MNC entry, compared to workers who were not exposed in the pre-entry year (63 percent), the entry year (68 percent), and the year after (70 percent).

expect that as these costs rise, entrepreneurs will be less likely to start a new venture.[7]

To further support the empirical relationship between MNCs, entrepreneurship, and wages, we also estimate how the prevalence of MNCs in a given locality relates to entrepreneurship and wages. Across a range of specifications, we find that employees are less likely to become entrepreneurs in areas in which the share of MNCs among tech firms is larger. At the same time, we find that individuals who work at MNCs earn substantially higher wages. Controlling for individual, firm, and year fixed effects, we

[7]Higher wages may help potential entrepreneurs obtain the capital necessary for a start-up venture in the long-run. However, the 10-year time frame of our data does not provide an opportunity to examine this possible effect. See Evans and Jovanovic (1989)

find that working at an MNC is associated with a 15 percent wage increase. Workers in local firms also earn more when the share of MNCs nearby is higher. Relative to areas with hardly any MNCs nearby, we show that the wage premium rises to 4.7 percent in regions with few MNCs nearby, 6.4 percent in areas with a medium share of MNCs, and 7.1 percent in areas with relatively many MNCs nearby.

Finally, we consider how MNCs impact startups at the intensive margin, finding suggestive evidence that startups do better when MNCs are active nearby. We find that a 1 percentage point increase in the share of MNCs nearby is correlated with a larger size of startups; 4.2 percent in the first year and 6.8 percent after three years. Startups tend to be more R&D focused when there are more MNCs nearby, specifically a 1 percentage point increase in the share of MNCS, is correlated with an 8 percent increase in the share of R&D workers. The increase in MNC density is also correlated with a 1.5 percentage point increase in the probability of the startup surviving for at least 3 years (at an averge survival rate of 62 percent). We find qualitatively similar but substantially stronger results when using an indicator for whether the startup founder previously worked at an MNC instead of local MNC density.[8] These differences in startup outcomes may be driven by stricter selection by entrepreneurs – who face higher outside wages following MNC entry – and/or by positive learning and technology spillovers resulting from increased MNC presence or direct MNC experience.

Previous work has shown that innovation by MNCs can have a positive impact on productivity at nearby local firms (Javorcik, 2004; Haskel et al., 2007; Keller and Yeaple, 2009; Gong, 2023). Multinationals have also been found to boost local economies by increasing wages both directly at their firms as well as other nearby local (non-MNC) firms (Setzler and Tintelnot, 2021; Alfaro-Urena et al., 2021). Setzler and Tintelnot (2021) use employer-employee panel tax data with foreign ownership information to measure the MNC wage premium in the US. They find that the average wage premium of a foreign multinational firm on its U.S. workers is 7 percent. This premium is larger for higher-skilled workers, making their estimates quite similar to our estimate of the wage premium in the Israeli tech industry. They also measure the indirect effect on wages of workers at nearby local firms and find evidence for a positive spillover effect. Alfaro-Urena et al. (2021), using Costa-Rican microdata, show that the MNC wage premium, averaging 9 percent, differs between college educated and non-college educated workers (12 percent and 8 percent respectively).[9] They also find that MNC presence accelerates wage growth in nearby local firms. This happens through two

[8]This pattern could reflect direct positive spillovers from MNC experience – such as knowledge transfer, networks, and managerial practices – or alternatively, selection bias if more capable startups are disproportionately able to attract founders or CEOs with strong MNC backgrounds.

[9]Gruber (2024) finds that the MNC wage premium in the Israeli tech sector is between 3 percent and 4 percent.

channels - labor market competition and firm-to-firm input-output linkages. A recent paper by Bessen et al. (2024) also finds that as large firms place more help-wanted adds, startups increase their advertised salary offers and decrease the number of ads they place.

The business dynamism literature explores how the process of business birth, growth, decline and exit— drives productivity and growth (Decker et al., 2020). Previous work has explored the decline in the number of startups in the US starting in the early 2000's (Decker et al., 2016a; Karahan et al., 2019; Akcigit and Ates, 2023). These papers jointly examine several important regularities, such as the rise in market concentration, the decline in firm entry, the lower job reallocation rate, and the decline in labor share. Our paper focuses specifically on how MNCs (i.e. globalization) are contributing to this phenomenon in terms of employee salaries, startup creation, and initial startup success.

The paper proceeds as follows. In the next section, we discuss the data and present descriptive statistics. In Section 3, we present the analysis and results, focusing first on the impact of MNCs on entrepreneurship, then on wages, and lastly on the success of nearby startups. Section 4 concludes.

2 Data and Descriptive Statistics

We use administrative panel data for all employees who worked in the Israeli tech sector in any period during the years 2005-2018 (about 562,000 individuals).[10] These data include a firm ISIC code, each employee's annual salary income, and the months employed by the firm in each year.[11] Our analysis focuses on full-time workers. We drop observations for workers who earn less than the minimum wage (implying a part-time position) and/or those who work less than 6 months in a specific firm during a given year.

We link the employment data from the Israeli tax authority to administrative records on individuals' education and demographic characteristics. For each worker, we observe their highest academic degree, field of study, type of institution attended (college or research university), number of high school matriculation units in math and English, and psychometric exam (Israel's equivalent to the SAT). Based on the field of study, we classify individuals as R&D workers if they earned degrees in computer science, elec-

[10]The tech sector is defined according to the International Standard Industrial Classification (ISIC) codes, and includes codes: 21–pharmaceuticals, 26–hardware products, 303– air and spacecraft, 61–telecommunications, 62–software, 63–information services and 72–R&D.

[11]The income data does not include equity-type remuneration (stock options). While this form of remuneration is common, it is evaluated and reported to the tax authority if and when the equity is sold, typically several years after it is granted.

trical engineering, communication systems engineering, aerospace engineering, math, physics, statistics, information systems, mechanical engineering, or industrial engineering. We also incorporate demographic information, including gender, age, marital status, number and age of children, country of birth, ethnicity (Jewish, Arab, or other), and religion. Finally, we add geographic data on the employee's place of residence and the employer's headquarters location.

We follow existing studies in the literature and identify founders as the top three highest-paid individuals in a newly established firm (Azoulay et al. (2020); Kerr and Kerr (2016)).[12] MNCs are firms controlled by a non-Israeli corporation that either establish a new firm or acquire an existing local firm in Israel.[13] We define MNC entry as the year when an MNC began operating within a 10-kilometer radius from where the employee works.[14] We define MNC exposure as the fraction of firms in a 10-kilometer radius of where an individual is employed that are MNCs. We also consider the impact of moving across the four quartiles of MNC exposure. The quartile cutoffs of MNC exposure in the data are 2.06 percent, 3.34 percent, and 4.21 percent of surrounding firms are MNCs.

In Table 1, we report summary statistics for individuals working in the Israeli tech sector in 2018 (the last year of our data). In columns (1)-(3), we compare entrepreneurs (column 1) and employees who were never classified as entrepreneurs in our data (column 2). Entrepreneurs earn 25 percent more than non-entrepreneurs.[15] The wage gap is smaller but still substantial (12.5 percent) among R&D workers. Entrepreneurs have a stronger academic background, are more likely to work in R&D, are younger than non-entrepreneurs, and are considerably more likely to be males. Column 1 reports characteristics of only 1,013 entrepreneurs out of a total of 2,467 entrepreneurs in 2018. The difference arises because many entrepreneurs were not formally employed in 2017 and likely worked in stealth mode. Using the total number of entrepreneurs in 2018, we calculate an overall entrepreneurship rate of about 1 percent per year in the full data. Importantly, however, as shown in Figure 1, the average entrepreneurship rate is substantially higher – around 14 percent – in areas exposed to MNC entry.

[12] Our results are robust to alternative definitions of founders such as the top one (Bernstein et al. (2022)), two, or five highest-paid individuals in a new firm.

[13] Indigenous tech multinationals whose core ownership, management, and intellectual property are in Israel are not considered MNCs in this paper.

[14] If multiple MNCs began operating in a 10 km radius in different years, we focus on the largest entry event, where size is based on the number of employees hired in the first three years.

[15] We use 2017 wage data to capture entrepreneurs' earnings prior to founding their own firms.

Table 1: Summary Statistics

	Role in firm			Type of firm		
	Entrepreneurs (1)	Employees (2)	Difference (3)	MNC (4)	Local (5)	Difference (6)
Average wage (NIS, as employee)	31,443 [28,249]	23,522 [36,019]	7,921*** (141.0)	31,503 [26,861]	21,395 [37,812]	10,109*** (143.8)
R&D average wage (NIS, as employee)	36,490 [25,519]	31,916 [23,510]	4,574*** (143.8)	39,805 [27,301]	28,260 [20,519]	11,545*** (141.0)
Psychometric score	644.1 [82.5]	609.5 [91.9]	34.6*** (0.47)	633.1 [84.1]	601.7 [93.0]	31.4*** (0.47)
BA (yes/no)	0.65 [0.48]	0.54 [0.50]	0.10*** (0.000)	0.65 [0.48]	0.52 [0.50]	0.13*** (0.000)
MA (yes/no)	0.26 [0.44]	0.19 [0.39]	0.08*** (0.000)	0.21 [0.41]	0.18 [0.39]	0.03*** (0.000)
Age	37.44 [8.48]	40.34 [10.47]	-2.90*** (0.05)	40.21 [9.66]	40.36 [10.67]	-0.15 (0.05)
Female	0.15 [0.36]	0.34 [0.47]	-0.19*** (0.000)	0.29 [0.46]	0.35 [0.48]	-0.06*** (0.000)
R&D worker	0.43 [0.50]	0.31 [0.46]	0.11*** (0.000)	0.47 [0.50]	0.27 [0.44]	0.20*** (0.000)
Entrepreneurship Rate				0.004 [0.061]	0.005 [0.070]	-0.001*** (0.000)
Observations	1,013	217,009		46,681	171,341	

Notes: The table presents mean characteristics for workers in the Israeli tech industry in 2018, calculated based on 2017 data. Columns (1)-(3) consider entrepreneurs and employees, while columns (4)-(6) focus on workers at MNCs and local firms. Standard deviations are reported in square brackets, and standard errors are in circle brackets. The Entrepreneurship variable measures the probability of becoming an entrepreneur in the following year (i.e., being one of the top 3 wage earners in a newly established firm). *significant at 10%; **significant at 5%; ***significant at 1%

Columns (4)-(6) of Table 1 compare workers employed in multinational corporations (MNCs) with those working in local firms. In 2018, MNCs employed 46,681 workers, over a fifth of the tech sector. MNCs attract workers with a stronger academic background, and pay roughly 32 percent higher wages than local firms. The share of R&D workers in MNCs is 47 percent versus 27 percent in local firms. The share of female workers in MNCs is 29 percent versus 35 percent in local firms.

Another interesting observation from Table 1 is that the average wage and academic background across entrepreneurs (column (1)) and workers employed at MNCs (column (4)) are quite similar. The similarity in characteristics between MNC workers and entrepreneurs may have led us to expect a high rate of entrepreneurship at MNC firms. Interestingly, we find the opposite, the entrepreneurship rate among MNC workers is lower than in local firms.

Our event study analysis estimates the effect of MNC entry on local employees. To alleviate concerns that differences in worker trajectories across localities drive the results, we construct a matched sample of "control" workers. Specifically, we use propensity score matching (PSM) to pair employees exposed to MNC entry (treated) with comparable employees in unaffected areas. Propensity scores are estimated based on pre-entry characteristics— age, field of study, type of institution attended, number of high-school math matriculation units, and prior-year wage.

We then implement a nearest-neighbor 1-1 matching algorithm with replacement to link treated workers with those of similar propensity scores at the time of the event. This allows us to run a dynamic difference-in-differences model to compare employment outcomes between "treated" and "control" workers, in the years both leading up to and following an MNC entry event. Appendix Figure A1 shows the kernel densities of the estimated propensity scores for treated and control workers. Before matching, some control workers had systematically lower probabilities of being exposed to MNC entry (see distribution of "Unmatched"). After matching, the distributions overlap closely, suggesting that our procedure successfully balances observable characteristics between the two groups.

Appendix Table A1 provides summary statistics for both the full sample and the matched sample. As can be seen in the table, the matching procedure is effective in making the treated-exposed and control-unexposed group look considerably more alike in observables. For instance, the R&D average wage difference falls ten times from the full sample to the matched sample, from 10,165 to 1,071 NIS. Also the academic background education variables (share of BA and MA degree holders and psychometric score) become more alike in the matched sample, and likewise the hi-tech experience variable.

3 The Impact of MNCs on Entrepreneurship, Wages, and the Success of New Firms

We exploit intertemporal and geographical variation in exposure to MNCs and measure the impact on three main outcomes: new startup formation, wages in local firms, and measures of startup success.

3.1 MNCs & Entrepreneurship

To examine the relationship between MNCs and entrepreneurship, we estimate the following event study:

$$entreprenuership_{ict} = \sum_{\substack{k=-4 \\ k\neq -1}}^{4} \alpha_k \, \text{Post}_k + \rho_i + \delta_c + \gamma_t + \epsilon_{itc}, \tag{1}$$

MNC_i represents the year in which an MNC began operating within a 10 km radius of where worker i was employed in year t, so that α_k captures the average difference in entrepreneurship between workers treated by an MNC opening in the vicinity of their workplace and all other workers up to 4 years before and after the event. We also control for worker (ρ_i), year(γ_t), and city (δ_c) fixed effects. If multiple MNC entries occurred in different years, we consider the largest event, where size is measured by the number of additional employees that an MNC employed 3 years after its entry.

Ideally, α_k in Equation 1, captures the effect of MNC entry on local entrepreneurship. If MNC entry suppresses local entrepreneurship, we would expect α_k to be negative for $k > 0$, relative to the baseline year immediately preceding the MNC's arrival. The α_k coefficients in the years leading up to the opening of an MNC should be zero if workers within a 10-kilometer radius of the location where an MNC will begin operating in the future had similar entrepreneurship rates to other employees in the sample.

The key identifying assumption underlying equation (1) is that, employees who were treated by MNC entry have similar entrepreneurship rates to employees working elsewhere. In other words, MNCs must not systematically time or target their entry toward areas with specific characteristics that are correlated with entrepreneurship rates. Additionally, it is important that there be no anticipation effects, whereby employees adjust their entrepreneurship decisions in response to reports or expectations that an MNC may soon begin operations nearby. Lastly, recent work has shown that two-way fixed effects estimators can produce biased estimates in the presence of staggered treatment timing when the response to MNC entrance may be heterogeneous across locations or time periods, as highlighted by Goodman-Bacon (2021), Callaway and Sant'Anna

(2021), and Sun and Abraham (2021).

A strength of our database is that it provides rich information on employee characteristics, allowing us to mitigate some of these concerns by constructing a closely matched control group. Using the matched sample described in Section 2, we estimate a dynamic difference-in-differences specification around the timing of MNC entry as the event:

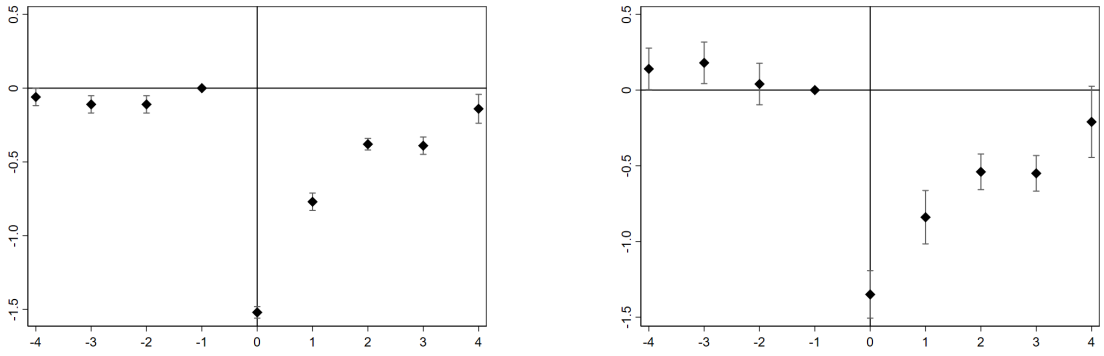
$$entreprenuership_{ict} = \sum_{\substack{k=-4 \\ k\neq -1}}^{4} \beta_k \, \text{Post}_k \times \text{MNC}_i + \sum_{\substack{k=-4 \\ k\neq -1}}^{4} \delta_k \, \text{Post}_k + \rho_g + \delta_c + \gamma_t + \epsilon_{itc}, \quad (2)$$

This specification allows us to control for yearly trends in entrepreneurship in matched control locations where MNC presence remained unchanged ($\sum_{k=-4}^{4} \delta_k$). The benefit of the dynamic difference in differences is that we can weaken the identifying assumption from that or MNC entrance being uncorrelated with unobserved factors impacting entrepreneurship to one of parallel trends. By controlling for matched group fixed effects (ρ_g), we can ensure that our estimates are driven by comparing treated workers to their own matched control workers. If the estimated coefficients β_k in the years leading up to the opening of an MNC are not significantly different from zero this would support the parallel trends assumption underlying the causal interpretation of our difference-in-differences estimate.

Panel (a) of Figure 2 presents the coefficients α_k from the event study specification (equation 1) run on the full sample. In the years leading up to MNC entry are fairly stable, increasing gradually by about 0.1 percentage points per year and reaching 1.4 percent in the year prior to entry (see Figure 1). Upon MNC entry, we measure a sharp statistically significant 1.5 percentage point decline in the probability that an employee starts a new firm. This represents a near-collapse of local entrepreneurship at the time of entry. While the negative effect remains significant in the years following entry, its magnitude decreases substantially. One year after entry, entrepreneurship rates rebound to roughly half of their pre-entry level, and subsequently stabilize at a new lower level – about 0.5 percentage points below the baseline, representing a decline of roughly 36 percent. It is only four years later, that entrepreneurship seems to be approaching the rates observed prior to MNC entry

In Panel (b) of Figure 2, we present the results of the dynamic difference-in-differences specification (equation 2) for the matched sample. These results are very similar to the event-study estimates obtained when focusing only on treated units. This similarity suggests that after controlling for individual fixed effects and city fixed effects, MNC entry is not highly correlated with unobserved characteristics related to entrepreneurship.

Figure 2: MNC Entry and Entrepreneurship



(a) Full sample (b) Matched sample

Notes: The figure presents results estimating the impact of MNC entrance on entrepreneurship. Panel (a) summarizes results from an event study specification on the full sample and Panel (b) summarizes results from a dynamic difference-in-differences analysis on the matched sample. MNC entry is defined as the year in which an MNC began operating within a 10-kilometer radius of where the employee works. In all subfigures, the vertical line at '0' indicates the year of MNC entry. The Y-axis is measured in percentage points.

Importantly, the close alignment between the two approaches provides reassurance that our results are not driven by MNCs selectively entering localities where entrepreneurship had already peaked and was likely to decline even in the absence of entry.

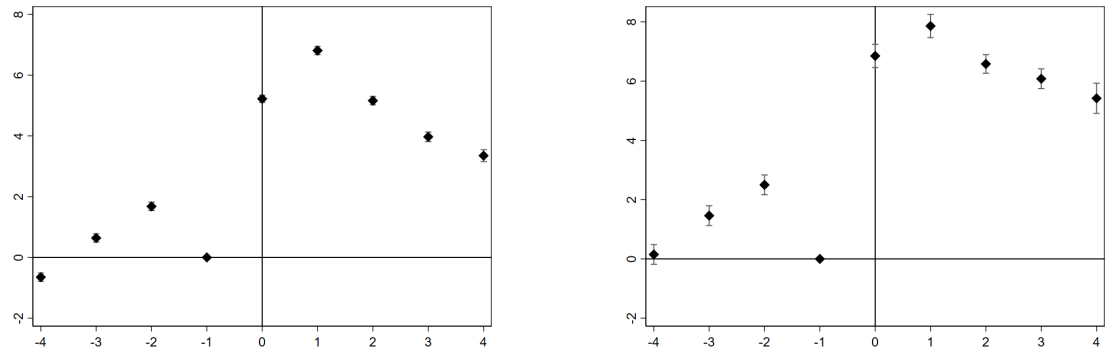
In the next section, we further explore the impact of MNC entry on the wages of local workers at surrounding firms.

3.2 The Wage Effects of MNCs

The decline in entrepreneurship that we observe for workers exposed to MNC entry may be driven by changes in local wage conditions. Indeed, previous work by Setzler and Tintelnot (2021) and Alfaro-Urena et al. (2021) find a significant increase in wages for workers in localities where MNCs begin operating. If MNC entry drives up wages this may increase the opportunity cost of entrepreneurship for workers in that locality.

To examine whether wages respond to MNC entry in our context, we re-estimate equations 1 and 2 using log(wage) as the dependent variable. The results, reported in Figure 3 show that while wages exhibited modest fluctuations of 1-2 percent per year prior to MNC entry, they rise significantly – by about 6–8 percent – in the year the MNC begins operating for individuals employed in the affected locality. Four years after entry, wages remain 4 to 6 percent higher than their pre-entrance levels. Taken together with the evidence in Figure 2, the results suggest that MNC entry leads to both higher wages and a decline in startup formation.

Figure 3: MNC Entry and Wages



(a) Full sample (b) Matched sample

Notes: The figure presents results estimating the impact of MNC entrance on wages. Panel (a) summarizes results from an event study specification on the full sample and Panel (b) summarizes results from a dynamic difference-in-differences analysis on the matched sample. MNC entry is defined as the year in which an MNC began operating within a 10-kilometer radius of where the employee works. In all subfigures, the vertical line at '0' indicates the year of MNC entry. The Y-axis is measured in percents.

3.3 Alternative Specifications

Having shown in our event-study specifications that MNC entry significantly affects both entrepreneurship and wages, we next examine how the intensity of exposure to multinational corporations in the vicinity of an individual's workplace shapes their entrepreneurship outcomes and wages. We focus on three dimensions: (i) whether an individual is directly employed by a multinational firm, (ii) the continuous local density of MNC firms in the surrounding labor market, defined as within a 10 km radius of the individual's workplace, and (iii) categorical measures of local MNC density, distinguishing between low, medium, and high levels of presence. These measures allow us to distinguish between the effects of direct employment opportunities within MNCs and the broader spillover environment generated by their presence. While employment at an MNC is not exogenous to an individual characteristics that may also influence entrepreneurship, and although this strategy does not allow the same types of counterfactual comparisons as our dynamic difference-in-differences specification, it can still provide insights into broader relationships between MNC activity, entrepreneurial entry, and wage dynamics.

We therefore estimate the effect of exposure to MNCs on two primary outcomes:

$$y_{ict}^{k} = X_{ict}\gamma + \gamma_1 \text{MNC}_{ict} + \rho_i + \delta_c + \theta_t + \epsilon_{ict}, \tag{3}$$

where $k \in \{1, 2\}$ indexes the two outcomes: y_{ict}^{1} is an indicator for entrepreneurship (equal to one if individual i in city c is one of the top three wage earners in a newly

established firm in year t), and y_{ict}^2 is the logarithm of wages for individual i in city c and year t.

The main explanatory variable, MNC_{ict}, captures MNC saturation in a given area in a given year. We apply three measure of MNC saturation. First, we consider the direct effect of being employed at an MNC. Next, we use the fraction of MNCs out of total firms within a 10km radius of where an individual is employed. Lastly, we consider quartiles of MNC presence: low MNC presence is the fraction of MNCs in a 10 km radius below 2.06%, low-medium is between 2.06% and 3.34%, medium presence is between 3.34% and 4.21%, and high MNC presence is above 4.21%.

The vector X_{it} controls for worker and firm characteristics that could impact entrepreneurship. At the worker level, we control for gender, age, age squared, religion, marital status, psychometric grade, 5-matriculation units in English and math, immigrant, children, and academic degree completed (BA, MA, and, as well as the specific field of study). Firm controls include size dummies[16], and the share of R&D workers at the firm in the previous year. We also include worker (ρ_i), city (δ_c), and year (θ_t) fixed effects. Table 2 presents the estimation results.

Columns (1)-(3) of Panel A of Table 2 document a robust negative relationship between employment at an MNC and subsequent entrepreneurial entry. The baseline estimate in column (1) which includes only year fixed effects, remains stable when controlling for observable worker and firm characteristics, as well as city fixed effects in column (2), and is largely unchanged when adding individual fixed effects in column (3). The magnitude of the effect suggests that individuals employed at MNCs are very unlikely to become entrepreneurs. They are one percentage point less likely to transition into entrepreneurs, at a baseline entrepreneurship rate of 1.4 percent. The robustness of this estimate to including individual fixed effects suggests that the negative relationship between MNC employment and entrepreneurship is not soley driven by selection into MNC employment. However, we cannot rule out the possibility that individuals endogenously select into MNC employment during periods when they would be unlikely to pursue entrepreneurship. In the remaining specifications of Table 2 we shift focus from individual MNC employment to local exposure by using measures of MNC saturation within a 10-kilometer radius of the employee's workplace. We view these local saturation measures as more plausibly exogenous than individual MNC employment.

[16] We use five firm size groups: 1-19 employees, 20-99, 100-249, 250-999, and 1000 or more.

Table 2: MNC Exposure and Entrepreneurship & Wage

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: Entrepreneurship rate									
Worked last year in MNC	-0.01***	-0.01***	-0.01***						
	(0.00)	(0.00)	(0.00)						
MNC percentage in 10km radius				-0.002***	-0.002***	-0.001***			
				(0.000)	(0.000)	(0.000)			
Low MNC presence in a 10 KM radius							-0.005***	-0.003***	-0.003***
							(0.000)	(0.000)	(0.000)
Medium MNC presence							-0.006***	-0.004***	-0.005***
							(0.000)	(0.000)	(0.000)
High MNC presence							-0.010***	-0.007***	-0.007***
							(0.000)	(0.000)	(0.000)
Observations	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084
Panel B: ln(Wage)									
Work in MNC	0.394***	0.122***	0.149***						
	(0.003)	(0.002)	(0.002)						
MNC percentage in 10km radius				0.065***	0.029***	0.027***			
				(0.001)	(0.001)	(0.001)			
Low MNC presence in a 10 KM radius							0.141***	0.049***	0.047***
							(0.002)	(0.002)	(0.002)
Medium MNC presence							0.210***	0.075***	0.064***
							(0.003)	(0.002)	(0.002)
High MNC presence							0.279***	0.086***	0.071***
							(0.004)	(0.003)	(0.003)
Observations	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084	2,825,084
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
City FEs, Worker & Firm controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Individual Fixed Effects	No	No	Yes	No	No	Yes	No	No	Yes

Notes: This table presents regressions results where in Panel A the outcome variable is entrepreneurship, and in Panel B it is ln(wage). "Worked last year in MNC" is a binary variable which is equal to 1 if the individual worked last year in an MNC. "MNC percentage in 10km radius" is the percent of MNCs out of total firms within a 10 km radius from where an individual works. The primary explanatory variables in columns (5)–(6) are dummies for the quartiles of MNC presence: low 2.06%-3.34%, medium 3.34%-4.21%, and high - above 4.21%. The bottom quartile serves as the baseline. The Worker & firm controls include the following variables: religion, age, age squared, psychometric grade, level and specific field of academic education, immigrant, married, children, number of English matriculation units, and firm size dummies (below 20, 20-99, 100-249, 250-999, and 1000 or more employees in the previous year). Standard errors are clustered at the individual level. *Significant at 10%; **significant at 5%; ***significant at 1%

In columns (4)-(6) of Table 2 we use a continuous measure of MNC presence to estimate its impact on entrepreneurship, while in Columns (7)-(9) we instead classify exposure into four quartiles. The results are qualitatively similar across the specifications. In column (4), we estimate that a 1 percentage point increase in MNC density decreases local entrepreneurship by 0.2 percentage points. This effect decreases to 0.1 percentage points when including individual fixed effects. These findings suggest that greater access to MNC employment opportunities is associated with a lower likelihood of pursuing entrepreneurship.

Our estimates in columns (7)-(9) of Table 2 offer a similar story. We find a strong negative relationship between entrepreneurship and MNC exposure, suggesting that workers employed in areas that move from the bottom quartile of MNC presence to the top quartile of MNC presence are 0.7 percentage points less likely to be entrepreneurs. Note that a 0.7 percentage points drop is very sizable compared to a baseline entrepreneurship rate of 1.4 percentage points for workers in cities prior to MNC entrance.

Panel B of Table 2 presents regression results from estimating equation 3, using log(wage) as the dependent variable. Columns (1)-(3) focus on the wage premium of workers at MNCs. In column (1), including only year-fixed effects, we find that MNC workers earn 39 percent more than those working at local firms. Controlling for worker and firm characteristics and including city fixed effects in Column (2) reduces the premium to 12 percent, which remains statistically significant. Including individual fixed effects in Column (3) increases the premium slightly to 15 percent.

Across Columns (4)–(9), we examine the relationship between local MNC density and wages, finding that a higher density of MNCs is correlated with higher wages at local firms. In particular, Column (9) shows that when an area moves from the lowest quartile of MNC presence (2-3 percent) to the highest quartile of MNC presence (above 4 percent), corresponds to a 7 percent wage increase.

3.4 Intensive versus Extensive Margin

Our results suggest that the entry of MNCs reduces startup creation, likely because they raise local labor costs. This effect, however, does not contradict prior evidence of positive productivity spillovers from MNCs to surrounding firms (see work by Javorcik (2004); Haskel et al. (2007); Keller and Yeaple (2009); Gong (2023)). Since MNCs are often better managed and more technologically advanced, they may provide valuable training for local employees, equipping them with managerial and technical skills that can foster the success of nearby firms. These skills could be particularly important for startup survival. Fewer entrepreneurs, may also mean that the start ups that are established have better prospects than those that are not, as entrepreneurs can more

easily raise capital and undertake greater risks for more promising start ups.

The selection process created by higher wages (due to MNC presence) can allow entrepreneurial resources (financial and human capital) to focus on the most innovative, highest quality startup endeavors. In other words, while MNCs may decrease entrepreneurship at the extensive margin, they may still have a positive impact on the intensive margin.

To better understand this dynamic, we create a database of all startups (i.e. new firms) observed in our data. We then analyze how startup outcomes vary with two measures of MNC exposure. First, we consider the fraction of MNCs in surrounding areas. A higher local MNC presence may generate knowledge spillovers, but it may also induce a selection mechanism whereby only the most promising ventures are able to enter in a high-wage environment. Second, we examine direct spillovers by identifying whether a startup founder has prior MNC experience, since the presence of more MNCs locally raises the likelihood of founders with such backgrounds. These analyses allow us to estimate the relationship between MNC expansion and startup performance across locations.[17] In equation (4), we model the relationship between these two measures of MNC exposure and a set of startup characteristics and outcomes (y^k_{ict}) that capture indicators of success as well as the adoption of good management practices:

$$y^k_{ict} = X_{ict}\phi + \phi_1 \text{MNCexp}^m_{ict} + \delta_c + \rho_t + \epsilon_{ict}, \tag{4}$$

where $m \in \{1, 2\}$ indexes the different measures of MNC exposure: MNCexp^1_{ict} is the fraction of MNCs within a 10 km radius of the firm (equal to MNC_{ict} in equation 3), and MNCexp^2_{ict} is an indicator for the founder having prior MNC experience. $k \in \{1, 2, \ldots, 5\}$ indexes the set of different startup outcomes: y^1_{ict} is an indicator for survival (equal to one if the startup survives at least three years), y^2_{ict} is the logarithm of employees in the first year, y^3_{ict} is the logarithm of employees in the third year, y^4_{ict} is the percent of MNC workers employed in the first year, and y^5_{ict} is the percent of female workers employed in the first year.

X_{ict} includes controls for founder characteristics that may influence firm outcomes and correlate with MNC experience. Specifically, we account for the founders' average years of work in the Israeli technology sector, the share of founders who graduated from a research university, and the share who were above-median earners in their previous firm. We also control for the share of founders with an R&D degree and the share of R&D employees in their previous firm. Additional controls include founders' average age, age squared, education, immigration status, parental status, and marital status.

[17] As discussed in the previous section, these results should be interpreted cautiously, since both founder characteristics and MNC location choices are endogenously determined.

Table 3: Spillovers from MNC Exposure

	Survival rate		log(Size) in first year		log(Size) after 3 years		R&D percentage		Female percentage	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Fraction MNC in 10 KM radius	0.015***		0.042***		0.068***		0.020***		0.002	
	(0.004)		(0.010)		(0.015)		(0.003)		(0.003)	
At least one former MNC founder		0.115***		0.84***		0.934***		0.121***		-0.03
		(0.017)		(0.042)		(0.056)		(0.011)		(0.016)
Average founder's hitech experience	0.016***	0.015***	0.039***	0.430**	0.032***	0.474**	-0.001	0.024***	-0.010***	-0.019***
	(0.003)	(0.003)	(0.007)	(0.152)	(0.009)	(0.182)	(0.001)	(0.002)	(0.002)	(0.003)
% founder's from research universities	0.057***	0.051***	0.057	0.794	0.109*	0.887	0.008**	0.307***	0.097***	0.031**
	(0.015)	(0.013)	(0.031)	(0.624)	(0.043)	(0.775)	(0.003)	(0.011)	(0.011)	(0.012)
% founders with high prior earnings	0.056***	0.070***	0.498***	0.472***	0.533***	0.508***	-0.002	0.003	-0.105***	-0.093***
	(0.014)	(0.016)	(0.033)	(0.032)	(0.043)	(0.042)	(0.003)	(0.003)	(0.010)	(0.160)
Mean outcome variable	0.62		6.2		9.6		0.25		0.25	
Observations	9,423		8,181		5,794		9,697		9,697	
Year, Location & Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table presents regression results from estimating equation (4). In the odd columns (1,3,5,7,9) the main explanatory variable is the fraction of MNCs in a 10 km radius of the startup. In the even columns (2,4,6,8,10) the main explanatory variable is equal to 1 if one of the founders has previous experience working at an MNC. All specifications also control for founder's average age, age squared, education, immigrant, has children, married, fraction of founders with an R&D degree, fraction of R&D workers in founders' previous firm. Standard errors are clustered at firm level. *Significant at 10%; **significant at 5%; ***significant at 1%

The full specification further incorporates location (δ_c) and year (ρ_t) fixed effects to absorb unobserved time- and place-specific factors affecting startup formation and outcomes.

In column (1) of Table 3 we find that a 1 percentage point increase in MNC density in the surrounding area is correlated with a 1.5 percentage point increase in (three-year) startup survival rates, at an average (three-year) survival rate of 62 percent. We also find a statistically significant effect of increasing MNC density on initial employment, a 1 percent increase in MNC saturation results in a significant 4.2 percent increase in initial startup size (column (3)). Three years later, startups active during periods with a 1 percentage point higher level of MNC presence in their geographic area are 6.8 percent larger (column (5)). In column (7), we find that startups operating in an area with higher MNC saturation are not only larger, but also, employ a higher fraction of R&D workers (1.2 percentage points more R&D workers at a baseline rate of 25 percent). These results suggest that at the intensive margin MNCs may play an important role in strengthening startup success.

MNCs have been found to have positive spillovers on surrounding firms, and one way for that to occur is by founders gaining experience with good management practices at MNC firms. Our analysis suggests that having at least one founder who originated from an MNC is correlated with an 11.5 percent increase in the probability that the firm survives for at least 3 years (column (2)). We find that startups who have a founder with MNC experience tend to start out with 84 percent more employees (column (4)), and grow even larger after three years (column (6)). In addition, having founder with MNC experience is correlated with 12.1 percentage point higher share of R&D workers (column (8)). We don't find that having an MNC founder is significantly correlated with the fraction of female workers at the startup (column (10)). While we can control for experience in the technology sector and previous wages in the specifications explored in Table 3, we cannot rule out an explanation where more motivated employees with higher potential tend to both gravitate towards MNCs and open successful startups.

4 Conclusion

Our study highlights the interplay between innovation and globalization, specifically regarding the influence of multinational corporations on entrepreneurship in the tech sector. Exploiting MNC entries for dynamic difference-in-differences specification analysis, we find that the presence of multinational corporations has a significant dampening effect on entrepreneurship. This effect is strongest in the first year of entry, but we continue to find entrepreneurship rates that are 30 percent lower even 3 years after MNC entry. We also show that MNCs led to higher wages both for those employed at MNCs

(15 percent) and for workers in nearby local tech firms (6-8 percent). We suggest that these higher wages are driving the drop in entrepreneurship. A drop in entrepreneurship can occur alongside positive spillovers for existing startups. Indeed, we find that startups that open in periods of higher MNC saturation have higher levels of initial employment and are less likely to fail.

Our results have important policy implications. Governments make great efforts to attract foreign multinationals, providing subsidies and tax benefits. These policies rely on the sizable positive externalities of MNCs on productivity, wages, and employment. Yet, if MNCs also indirectly limit and discourage entrepreneurship then the overall impact on the economy is much more nuanced, especially in the long run. Our results make a first step towards better understanding this tradeoff.

References

Aghion, P., U. Akcigit, and P. Howitt (2014). What do we learn from schumpeterian growth theory? In *Handbook of economic growth*, Volume 2, pp. 515–563. Elsevier.

Aghion, P. and P. Howitt (1992). A model of growth through creative destruction. *Econometrica 60*(2), 323.

Ahern, K. R. (2025). Multinational firms and cross-border mergers: Theory and evidence. Technical report, National Bureau of Economic Research.

Akcigit, U. and S. T. Ates (2023). What happened to us business dynamism? *Journal of Political Economy 131*(8), 2059–2124.

Alfaro-Urena, A., I. Manelici, and J. P. Vasquez (2021, April). The Effects of Multinationals on Workers: Evidence from Costa Rican Microdata. Working Papers 285, Princeton University, Department of Economics, Center for Economic Policy Studies.

Antràs, P. and S. R. Yeaple (2014). Multinational firms and the structure of international trade. *Handbook of international economics 4*, 55–130.

Audretsch, D. B., M. C. Keilbach, and E. E. Lehmann (2006). *Entrepreneurship and economic growth*. Oxford University Press.

Azoulay, P., B. F. Jones, J. D. Kim, and J. Miranda (2020). Age and high-growth entrepreneurship. *American Economic Review: Insights 2*(1), 65–82.

Bernstein, S., E. Colonnelli, D. Malacrino, and T. McQuade (2022). Who creates new firms when local opportunities arise? *Journal of Financial Economics 143*(1), 107–130.

Bessen, J., F. Poege, and R. Röttger (2024). Competing for talent: Large firms and startup growth. *2024*(1), 12451.

Callaway, B. and P. H. Sant'Anna (2021). Difference-in-differences with multiple time periods. *Journal of econometrics 225*(2), 200–230.

Chodorow-Reich, G., P. Nenov, V. Santos, and A. Simsek (2023). Stock market wealth and entrepreneurship. *Available at SSRN 4530644*.

Decker, R. A., J. Haltiwanger, R. S. Jarmin, and J. Miranda (2016a). Declining business dynamism: What we know and the way forward. *American Economic Review 106*(5), 203–207.

Decker, R. A., J. Haltiwanger, R. S. Jarmin, and J. Miranda (2016b). Where has all the skewness gone? the decline in high-growth (young) firms in the US. *European Economic Review 86*, 4–23.

Decker, R. A., J. Haltiwanger, R. S. Jarmin, and J. Miranda (2020). Changing business dynamism and productivity: Shocks versus responsiveness. *American Economic Review 110*(12), 3952–3990.

Delpeuch, S., A.-C. G. Cabral, F. Hugger, and P. O'Reilly (2025). Mne business functions and corporate taxation. Technical report, OECD Publishing.

Evans, D. S. and B. Jovanovic (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy 97*(4), 808–827.

Gong, R. K. (2023). The local technology spillovers of multinational firms. *Journal of International Economics*, 103790.

Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing. *Journal of econometrics 225*(2), 254–277.

Gruber, N. (2024). The foreign firm wage premium in the Israeli tech sector. *Journal of International Economics 152*(C), 104017.

Haskel, J. E., S. C. Pereira, and M. J. Slaughter (2007). Does inward foreign direct investment boost the productivity of domestic firms? *The Review of Economics and Statistics 89*(3), 482–496.

Javorcik, B. S. (2004). Does foreign direct investment increase the productivity of domestic firms? in search of spillovers through backward linkages. *American Economic Review 94*(3), 605–627.

Kamal, F., J. McCloskey, and O. Wei (2022). *Multinational Firms in the US Economy: Insights from Newly Integrated Microdata*. US Census Bureau, Center for Economic Studies.

Karahan, F., B. Pugsley, and A. Şahin (2019). Demographic origins of the startup deficit. Technical report, National Bureau of Economic Research.

Keller, W. and S. R. Yeaple (2009). Multinational enterprises, international trade, and productivity growth: firm-level evidence from the united states. *The Review of Economics and Statistics 91*(4), 821–831.

Kerr, S. P. and W. R. Kerr (2016). Immigrant entrepreneurship. In *Measuring entrepreneurial businesses: Current knowledge and challenges*, pp. 187–249. University of Chicago Press.

Schumpeter, J. A. (1942). Socialism and democracy. *New York*.

Senor, D. and S. Singer (2011). *Start-up nation: The story of Israel's economic miracle*. McClelland & Stewart.

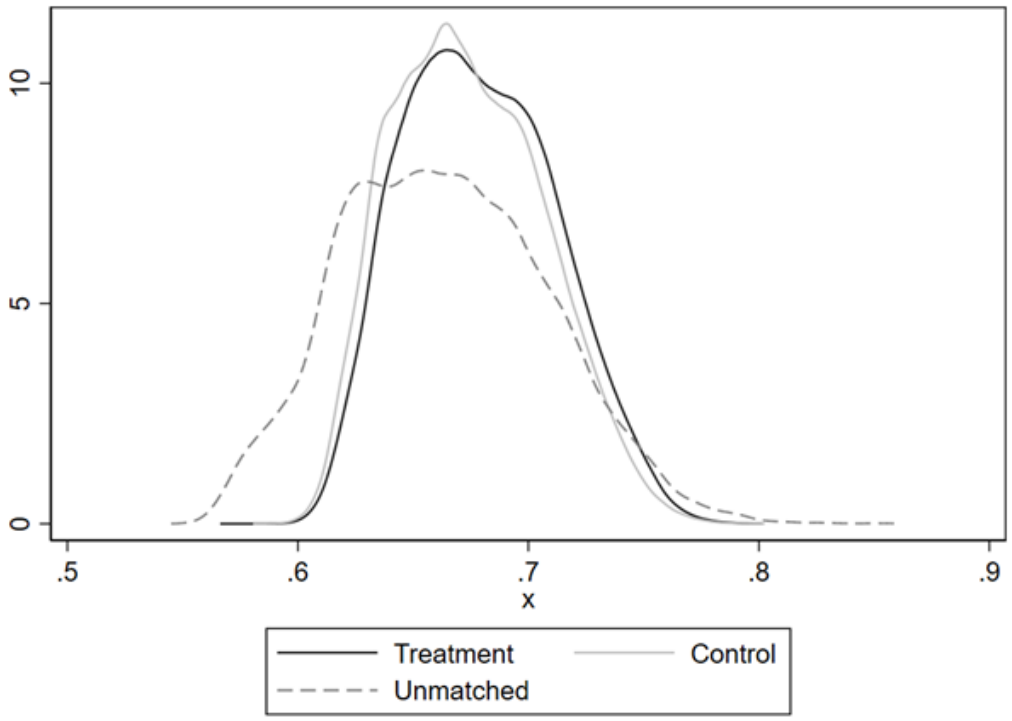
Setzler, B. and F. Tintelnot (2021). The effects of foreign multinationals on workers and firms in the united states. *The Quarterly Journal of Economics 136*(3), 1943–1991.

Sun, L. and S. Abraham (2021). Estimating dynamic treatment effects in event studies with heterogeneous treatment effects. *Journal of econometrics 225*(2), 175–199.

Tintelnot, F. (2017). Global production with export platforms. *The Quarterly Journal of Economics 132*(1), 157–209.

A Appendix Tables and Figures

Figure A1: Kernel density of propensity score matching



Notes: This figure presents kernel density estimates of the propensity score for treated units, matched control units, and unmatched control units.

Table A1: Summary Statistics

	Full sample			Matched sample		
	Exposed (1)	Unexposed (2)	Difference (3)	Exposed (4)	Unexposed (5)	Difference (6)
Distance to work (km)	28.67	33.38	-4.71***	29.28	30.30	1.02***
	[33.2]	[39.3]	(0.3)	[34.0]	[35.6]	(0.2)
Avarage wage (as employee in NIS)	19,018	10,630	8,388***	18,931	17,088	1,842***
	[19,133]	[12,796]	(188)	[19,232]	[16,336]	(116)
R&D avarage wage (as employee in NIS)	27,544	17,378	10,165***	27,482	26,410	1,071***
	[21,425]	[9,920]	(609)	[21,570]	[17,899]	(278)
R&D workers	0.24	0.12	0.125***	0.24	0.22	0.024***
	[0.43]	[0.32]	(0.00)	[0.43]	[0.41]	(0.00)
Female	0.38	0.44	-0.06***	0.39	0.36	0.027***
	[0.49]	[0.50]	(0.00)	[0.49]	[0.48]	(0.00)
Psychometric score	597.5	593.5	3.97***	597.4	597.0	0.4
	[96.4]	[102.3]	(1.4)	[96.5]	[97.6]	(0.9)
Math matriculation units	0.14	0.17	-0.03***	0.15	0.13	0.015***
	[0.36]	[0.38]	(0.00)	[0.36]	[0.34]	(0.00)
BA	0.31	0.23	0.074***	0.31	0.27	0.04***
	[0.46]	[0.42]	(0.00)	[0.46]	[0.45]	(0.00)
MA	0.16	0.09	0.07***	0.16	0.14	0.018***
	[0.36]	[0.29]	(0.00)	[0.36]	[0.35]	(0.00)
Age	38.0	32.3	5.6***	37.9	36.7	1.16***
	[10.7]	[9.6]	(0.1)	[10.7]	[10.5]	(0.1)
Hi-tech experience	4.1	0.9	3.27***	4.1	2.8	1.3***
	[3.0]	[1.6]	(0.0)	[2.9]	[3.5]	(0.0)
Observations	2,867,572	235,790		2,013,619	701,052	

Notes: The table presents mean characteristics for all sample in columns (1)-(3), while columns (4)-(6) present the same statistics for the matched sample only. "Exposed" implies that the worker was exposed to an MNC entry event. Standard deviations are reported in square brackets, and standard errors are in circle brackets. *significant at 10%; **significant at 5%; ***significant at 1%