

Skilled Immigrants, Corporate Acquisitions, and Shareholder Value

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Abstract

I use corporate acquisitions to study whether gaining access to a skilled immigrant labor force generates growth opportunities and creates shareholder value. Exogenous variation in the skill structure of new immigrants is generated by allocating skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. I remove time-invariant city-specific factors, historical city-specific labor market characteristics that are allowed to vary over time, and current city-specific labor demand. I find that firms located in cities with a skilled immigrant labor force are more likely to be the target of an acquisition by a non-local firm, as evidenced by both deal volume and value. Additionally, announcement stock returns, reflecting estimates of shareholder value creation, are higher for acquisitions of target firms located in such cities. Post-acquisition corporate profitability is also higher, driven by greater cost efficiency. Overall, a skilled immigrant labor force is beneficial for shareholders.

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1. Introduction

Even as immigrants account for an ever growing share of the labor force, their effect on the economy is contentious, even among scholars.¹ To better understand the economic impact of immigrants, it is instructive to examine the firms to which they supply their labor. Surprisingly, however, very few studies examine the impact of immigration on firms (Kerr, Kerr, and Lincoln (2015)). Moreover, given the primacy of skilled labor in the knowledge economy, it is not merely the supply of immigrants but especially their skill that should matter to their corporate employers.² In this paper, I focus on the skill structure of the immigrant labor force: the relative supply of skilled versus unskilled immigrant labor. I ask whether gaining access to a skilled immigrant labor force generates growth opportunities for firms and creates shareholder value. I use corporate acquisitions to demonstrate that this is indeed the case, which suggests a positive impact of skilled immigration on the corporate sector.

Skilled immigrant labor can generate growth opportunities in a number of different ways. Since skilled workers are more productive as a result of their better training, superior ability, greater creativity, etc., an increase in the relative supply of skilled labor generates new investment opportunity for firms. Moreover, a greater supply of skilled labor may lead to skilled workers accepting lower wages, thereby lowering labor costs for firms. Additionally, skilled labor can generate greater local agglomeration effects that increase labor productivity, for instance, through greater knowledge spillovers or more efficient labor markets. Furthermore, skilled labor can increase the local multiplier effect because skilled workers have larger incomes

¹ For example, immigration encourages workers to specialize in order to increase their productivity (Peri and Sparber (2009)), but it also leads to lower employment for native workers (Card (2001)). Similarly, immigration raises property prices (Saiz (2007)), but it also lowers residential diversity (Cascio and Lewis (2012)).

² Indeed, the existing empirical evidence provides hints about the relevance of immigrant skill. For instance, Hunt and Gauthier-Loiselle (2010) find that skilled immigration affects patenting rates across U.S. states, which could affect growth opportunities. Additionally, Lewis (2011) finds that skilled immigration affects the adoption rate of automation machinery in manufacturing plants.

to spend.³ These cases illustrate that firms can benefit from a skilled labor force whether the firm itself employs skilled workers or skilled workers employed elsewhere improve the general environment of the local labor market. In all cases, a skilled local immigrant labor force can generate growth opportunities for firms with access to it.

Corporate acquisitions offer numerous advantages for studying firms expanding their access to a skilled labor force. Acquisitions can be a more efficient way for firms to gain access to a skilled labor force compared to hiring away individuals or teams from other locations (for instance, due to imperfect labor mobility or local agglomeration of human capital). Furthermore, acquisitions often have the objective of rebalancing the firm's workforce, which involves considerable hiring and firing after the acquisition.⁴ This workforce rebalancing process is a promising setting in which to examine the significance of a skilled labor force. Moreover, corporate acquisitions are large investment projects with a rich set of observable features. These features include the location and timing of the project, which are publicly revealed when the acquisition is announced and completed. These features also include estimates of shareholder value creation (via stock returns around acquisition announcements) as well as realized corporate performance (via the post-acquisition change in the acquirer firm's profitability). These important features are not generally observable for internal investment such capital expenditures.

In a number of ways previously outlined, a skilled labor force generates growth opportunities for firms with access to it. In the context of corporate acquisitions, to the extent that labor is a production input required by the combined firm, this implies that a skilled labor

³ For empirical evidence that suggests these channels, see Peri and Sparber (2009) for productivity. For lower wages, see Card (2001) and Borjas (2003). For local agglomeration, see Moretti (2004), Ciccone and Hall (1996), and Ellison, Glaeser, and Kerr (2010). Finally, for local multipliers, see Moretti (2010).

⁴ See Davis, Haltiwanger, Handley, Jarmin, Lerner, and Miranda (2014). In terms of the net effect of hiring and firing, a large body of evidence shows that the change in employment is, at worst, small and negative (see Section 2.2 of Dessaint, Golubov, and Volpin (2017) for a discussion and references).

force increases the synergies from combining the acquirer and target firms.⁵ Therefore, stated from the acquirer's perspective, my hypothesis is that gaining access to a skilled local immigrant labor force located around the target firm generates growth opportunities for the acquirer firm and creates shareholder value. This hypothesis makes two key predictions that I test. The first prediction is that firms located in cities with a skilled immigrant labor force are more likely to become the target of an acquisition by a non-local firm. The second prediction is that acquisitions of target firms located in such cities should create more acquirer shareholder value because these acquisitions are more profitable for acquirer firms. Specifically, acquisition announcement stock returns and post-acquisition corporate profitability should both be higher.

Examining the causal impact of the skill structure of the immigrant labor force is empirically challenging. While skilled immigration can attract acquisition activity, it is also possible that acquisitions create jobs that attract skilled immigrants. Similarly, immigration and acquisition activity may have determinants in common but these may be unobservable and thus uncontrollable. I overcome these challenges by using the projected skill structure of new immigrants as an exogenous shock to the skill structure of the labor force located around the target firm. My identification is based on the well documented tendency of immigrants from a given country to settle in cities in which other immigrants from the same country have settled in the past (for instance, to take advantage of the cultural, entertainment, or business networks offered by fellow immigrants). As I explain in detail below, I ensure that the skill structure of new immigrants that I project can only be determined by a city's historical immigrant country

⁵ My reasoning is supported by the earlier finding that firms engage in considerable hiring and firing as a result of acquisitions (Davis et al. (2014)). Additionally, for skilled labor to affect merger synergies, labor does need to be a production input for the combined firm. However, the merger complementarities between the acquirer and target firms need not include labor. To give a simple Cobb-Douglas example, output depends on both labor and capital, but both firms may have sufficient labor and instead merge in order to transfer capital from the acquirer to the target. Finally, the effect of skilled labor on merger synergies is not fully reflected in the standalone value of the target because these synergies only materialize if the merger takes place (the probability of a merger is generally less than one).

composition, not by its current economic conditions. This approach follows a rich tradition in the labor economics literature starting with Bartik (1991).⁶

I construct the skill structure of the new immigrant labor force using data on both the historical stock and the current flow of immigrants. From 1960, I use stock data on the distribution across 177 cities in the U.S. of immigrants from 72 countries around the world. For each country, I calculate the share of immigrants from that country located in each city. These historical (1960) country-city shares form the basis of allocation for current immigration flows from the country in question. Then, for each of the three decennial censuses from 1990 to 2010, I use flow data to allocate total immigration to the U.S. from each country to each city based on historical country-city shares.⁷ To be conservative, the total flow of a country that I allocate excludes the actual flows of the corresponding country-city pair. I sum up the immigration flows from all countries to a given city to arrive at the projected new immigrant labor force of that city. Finally, I perform these calculations separately for skilled and unskilled immigrants (defined below) to arrive at their respective numbers in each city and thence their skill share (the proportion of immigrants that are skilled). I find that this projected skill share of new immigrants is a significant predictor of the actual skill share of the entire labor force, which validates its use as a shock in this context. In my main analysis, I take a reduced form approach because I am interested in the direct effect of immigrants. However, I verify that my results are similar if I take an instrumental variables approach instead.

To classify individuals as skilled or unskilled, I follow the labor economics literature and use educational attainment. This is not only a natural choice but also a practical one because

⁶ See Card (2001), Cortés and Tessada (2011), and Lewis (2011) for examples specific to immigration shocks.

⁷ To illustrate, I first calculate in 1960 the distribution across U.S. cities of Indian immigrants to the U.S. Then, I take Indian immigrants to the U.S. in 1990 and allocate them to cities based on the previously calculated 1960 Indian-city distribution. Finally, I repeat this procedure for all countries in 1990.

information on educational attainment is widely available down to the individual level, for both immigrants and natives. For the threshold for skilled versus unskilled labor, I need a basic level of educational attainment that is meaningful across a wide range of industries, not only for the labor force as a whole but also for immigrant workers. For this reason, I use the high school diploma threshold, which classifies 73% of immigrants as "skilled" on the basis of having at least a high school diploma. This skill share varies widely across cities (standard deviation of 16%), and it exhibits similar variation to the skill share constructed using the college degree threshold, which classifies 35% of immigrants as skilled. Indeed, the two skill shares are highly correlated (correlation of 0.85). In my main analysis, I use the high school diploma threshold to be conservative, but I verify that my inferences are unchanged if I use the college degree threshold instead.

To describe the salient features of my sample, the acquisitions that I use (from SDC) cover 15 years divided into three quinquennial periods. Each of these periods is centered on the corresponding decennial census, and there are three of these from 1990 to 2010. Since local acquisitions cannot be motivated by gaining access to the local labor force, or they may in fact be motivated by the objective of spreading the high costs of scarce skilled labor over a larger firm, I exclude acquisitions in which the acquirer and target are both located in the same city. The cities in my sample are metropolitan statistical areas, to be precise, and they account for 70% of the population of the U.S. New immigrants are people who immigrated to the U.S. during the five years prior to a given decennial census. There are 8.3 million new immigrant workers (ages 20-64) in my sample, and they account for 18% of total immigrant labor force. I calculate the projected skill share of new immigrants for each decennial census and use it for the corresponding quinquennial period.

I design my regression specifications to account for factors that drive both the local skill structure of new immigrants and local acquisition activity today. I use historical country-city shares from 1960 because they are plausibly exogenous to local economic activity today.⁸ I also include city fixed effects in my specifications to control for time-invariant factors that may drive both the projected skill structure and acquisition activity. It is also possible that local economic conditions in 1960 not only directly affected the country-city shares at that time but also have some time-varying direct effect on acquisition activity today. To capture such time-varying factors, I use control variables for characteristics of the city's labor market in 1960 interacted with decennial fixed effects. Finally, to be very conservative, I also control for the city's current labor demand, constructed similarly to the projected skill structure but using industries instead of countries and employment instead of immigration.

I first test the prediction that firms located in cities with a skilled immigrant labor force are more likely to become the target of an acquisition by a non-local firm. To this end, I examine the rate of acquisitions at the industry-city level. I find that a more skilled local immigrant labor force results in greater acquisition activity, whether measured by the volume or value of deals. For example, a 10 percentage point increase in the projected skill share of new immigrants causes an increase of about 6% in both the volume and value of deals. Compared to their standard deviation rather than their mean, the increase is instead roughly 2%. The share of firms in the industry that are acquired also increases as a result of a higher projected skill share. Since acquisition activity at the industry level may vary systematically across cities or over time, my

⁸ This is not only due to the minimum time lag of three decades, but also the dramatic change in the composition of U.S. immigration in the course of the 1960s. U.S. immigration policy since the 1920s effectively constrained immigration primarily to Northwestern Europeans. The Hart-Celler Act of 1965, which went into effect in mid-1968, effectively eliminated these country limits and created a preference system that prioritized skilled immigrants and relatives of U.S. persons as well as refugees. Partly as a result, the composition of U.S. immigration changed from small minority non-white in 1960 to large majority non-white by 1970.

specifications include control variables for industry-city characteristics as well as industry-city fixed effects and industry-year fixed effects.

Next, I test the prediction that acquirer shareholder value creation should be greater for acquisitions of target firms located in cities with a skilled immigrant labor force because these acquisitions are more profitable for acquirer firms. To this end, I examine both estimates of value creation at the announcement of the acquisition and realized corporate performance after the acquisition. In my ex ante analysis, I examine stock returns around acquisition announcements. I start with acquirer returns, which are available for acquisitions of both public and private targets. I find that acquirer returns are higher as a result of a more skilled local immigrant labor force, which suggests that investors anticipate an increase in the profitability of the acquirer. For example, a 10 percentage point increase in the projected skill share of new immigrants causes an increase in acquirer stock returns of about 1 p.p., corresponding to roughly 10% of a standard deviation. Moreover, restricting my sample to acquisitions of public targets, I also find that the combined returns of the acquirer and target (i.e., their value weighted stock returns) are also higher. This indicates that the higher stock returns of acquirer firms are not merely a wealth transfer from targets to acquirers.⁹ Since announcement returns may vary systematically based on various deal and firm characteristics, my specifications include control variables for firm characteristics, industry fixed effects, and city fixed effects, for both acquirer and target firms. Additionally, to ensure that the results cannot be driven by the skill structure of the labor force located around the acquirer firm, I also control for it directly.

⁹ Instead, the higher stock returns could be a reflection of higher growth opportunities for the acquirer alone, synergies between the acquirer and target firms themselves, or a correction of investors' undervaluation of the acquirer firm based on information revealed by the acquisition announcement. All three explanations are consistent with my hypothesis.

In my ex post value creation analysis, I examine the post-announcement change in the acquirer firm's profitability by comparing each of the three years post-acquisition to the pre-acquisition period. I find that the profitability of acquirers increases steadily during the three years after the acquisition, both overall and per employee. For example, a 10 percentage point increase in the projected skill share of new immigrants leads to an increase in operating income of about 1 p.p. relative to total assets three years post-acquisition, and by roughly \$5,000 per employee, with each effect corresponding to roughly 6% of a standard deviation.

Finally, I examine the sources of the post-acquisition increase in profitability by decomposing it into its sales and cost components. I do not find that sales increase, indicating that the value created by acquisitions cannot be attributed to greater market power in the product market. However, I do find that costs decrease, both overall and per employee, and that there is a decrease in labor related costs in particular. This indicates that the increase in profitability is attributable to the greater cost efficiency resulting from a more skilled local immigrant labor force. Additionally, I find that post-acquisition profitability is increasing in the relative size of the deal, consistent with the intuition that, in larger deals, the labor market of the target firm is relatively more important to the acquirer firm.

My study contributes to several prominent literatures, starting with the burgeoning literature on labor and finance. Prior studies generally examine the effect on corporate activities of particular institutional and legal features of labor markets that increase the bargaining power of employees or decrease their employment risk. For example, one early study finds that workforce unionization leads firms to choose higher leverage (Matsa (2010)), while other studies find an impact on various corporate policies of unemployment insurance, employment

protections, and restrictions on labor mobility.¹⁰ A recent study also examines a fundamental feature of labor markets, age structure, and finds that firms in younger labor markets produce more innovation (Derrien, Kecskés, and Nguyen (2018)).

Several prior studies specifically examine takeovers. Some find that employment protections reduce value creation from mergers as well as takeover activity (John, Knyazeva, and Knyazeva (2015) and Dessaint, Golubov, and Volpin (2017)). Another study uses textual analysis to show that some corporate acquisitions are aimed at hiring certain key employees of the target firm (Ouimet and Zarutskie (2016)). Differently from them, I study another fundamental feature of labor markets that is new to this literature, skill structure, and I show that the value and profitability of firms increases as a result of expanding their access to a skilled labor force.

Finally, I contribute to the labor economics literature on the impact of immigration and labor force skill. Early studies examine the effect of immigrant labor supply shocks on the wages of natives (Card (2001), Borjas (2003), and Cortés and Tessada (2011)). Later studies expand beyond labor market outcomes and examine the price of immigrant intensive services (Cortés (2008)), aggregate innovation (Hunt and Gauthier-Loiselle (2010)), and automation machinery (Lewis (2011)). Focusing on the corporate policy implications of immigration, I show that skilled immigration increases both acquisition activity and the profitability of acquisitions.

The rest of this paper is organized as follows. Section 2 presents the methodology. Sections 3, 4, and 5 presents the analyses of the rate of acquisitions, stock returns around acquisition announcements, and profitability resulting from acquisitions, respectively. Section 6 concludes.

¹⁰ For the impact of unemployment insurance, see Agrawal and Matsa (2013) and Hombert, Schoar, Sraer, and Thesmar (2018). For employment protections, see Acharya, Baghai, and Subramanian (2014), Simintzi, Vig, and Volpin (2015), and Bai, Fairhurst, and Serfling (2017). Finally, for labor mobility restrictions, see Jeffers (2018).

2. Methodology

2.1. Measurement of Skill Structure of New Immigrants

My objective is to explore and better understand the effect of the skill structure of immigrants on corporate acquisitions. The difficulty is that people choose where they live and work. Consequently, local economic activity, including acquisition activities, can affect the skill structure of immigrants because economic conditions affect migration.

For this reason, I do not use the actual skill share of new immigrants but rather the projected skill share of new immigrants that I construct specifically for identification purposes. My identification is based on the well documented tendency of immigrants from a given country to settle in cities in which other immigrants from the same country have settled in the past (Bartel (1989) and Lalonde and Topel (1991)). This happens, for instance, because new immigrants take advantage of the cultural, entertainment, or business networks offered by fellow immigrants.¹¹ Additionally, immigrant settlements in a city several decades ago occur for a variety of reasons that may be correlated with or caused by contemporaneous economic activity, but these reasons are plausibly exogenous to current economic activities.

Following the labor economics literature, I use education to classify workers as skilled or unskilled and then to construct the skill share of new immigrants. Education is a natural and practical choice because information on educational attainment is widely available down to the individual level, for both immigrants and natives. As for the threshold for skilled versus unskilled labor, I require a basic level of educational attainment that is meaningful across a wide range of industries, not only for the labor force as a whole but also for immigrant workers.

I use data from the 2000 decennial census to determine the basic skill level that is meaningful across industries. Among all the workers in 224 industries in the 2000 census, a

¹¹ For example, see Gonzalez (1998), Munshi (2003), and Kerr and Mandorff (2015).

majority have a high school diploma. More precisely, 63% of them have a high school diploma but no college degree, 24% have a college degree, and 13% have no high school diploma. Among the 20 lowest skill industries (i.e., more than 28% of their employees have no high school diploma) such as apparel and accessories, meat products, automobile parking and carwashes, and logging industries, employees with a high school diploma but no college degree account for 57%. Among the 20 highest skill industries (i.e., more than 50% of their employees have a college degree) such as colleges and universities, legal services, computer and data processing services, and investment companies, employees with a high school diploma but no college degree account for 40%. Overall, a high school diploma is widely considered to be a basic skill level across all industries, whereas the prevalence of a college degree is concentrated in a much narrower set of industries.

Given the prevalence of a high school diploma across industries, I use the high school diploma threshold to define skilled versus unskilled labor. This threshold classifies 73% of immigrant workers as "skilled". I use the high school diploma threshold in my main analysis to be conservative, but I verify that my inferences are unchanged if I use the college degree threshold instead. (The results are reported in the Appendices.)

I construct the skill structure of the new immigrant labor force using data on the historical stock of 177 cities and the current flows of immigrants from 72 countries around the world.¹² I use data on country stocks from 1960 to ensure that the country distributions are plausibly exogenous to local economic activity today. I calculate $Share_{c,i,1960}$, which is the percentage of all immigrants from country i included in the 1960 census living in city c . Then, for each of the

¹² There is a long tradition in the labor economics literature exploiting this tendency to construct "shift-share" type labor supply shocks based on immigration flows. In this context, the immigrant flows to the U.S. from a particular country at a particular point in time correspond to the "shift", and the historical distribution across the U.S. of immigrants from the country corresponds to the "share" (Cortés (2008), Cortés and Tessada (2011), and Lewis (2011)).

1990, 2000, and 2010 decennial censuses, I calculate $Skilled_i$ and $Unskilled_i$, which are skilled and unskilled new immigrant flows to the U.S. from country i . New immigrants are those that arrived in the U.S. during the last five years. Then, I allocate U.S.-level skilled and unskilled new immigrant flows from each country to each city based on country-city shares in 1960.

For each decennial census, the projected flows of skilled new immigrants from country i to city c are $Share_{c,i,1960} \times (Skilled_i - Skilled_{c,i})$. The term $(Skilled_i - Skilled_{c,i})$ is U.S.-level skilled new immigrants flows excluding city c . The exclusion of city c , recommended by Goldsmith-Pinkham, Sorkin, and Swift (2018), is done to address the concern that the U.S.-level immigrant flows may be endogenous to the city's current labor demand.¹³ Similarly, the projected flows of unskilled new immigrants from country i to city c are $Share_{c,i,1960} \times (Unskilled_i - Unskilled_{c,i})$.

I sum up the immigration flows of 72 countries to arrive at the projected new immigrant flows to the city. The flows of skilled new immigrants to city c are $\sum_i Share_{c,i,1960} \times (Skilled_i - Skilled_{c,i})$. Similarly, for unskilled new immigrants, this measure is $\sum_i Share_{c,i,1960} \times (Unskilled_i - Unskilled_{c,i})$. Finally, the projected skill share of new immigrants $Skill_Share_c$ in city c is the ratio of the projected number of skilled new immigrants to the projected number of total new immigrants: $Projected_Skilled_c / (Projected_Skilled_c + Projected_Unskilled_c)$.

I use the projected skill share of new immigrants as an exogenous shock to the skill structure of the labor force and use it directly in the regressions rather than as an instrument for the actual skill share of the labor force. Nevertheless, I verify that my results are similar if I take an instrumental variables approach instead. (The results are reported in the Appendices.)

¹³ Not limited to empirical work specifically on immigration, this exclusion is applied by Autor and Duggan (2003), Wozniak and Murray (2012), Hunt (2017), and Amior and Manning (2018), among others.

2.2. Empirical Examination of Skill Share of New Immigrants

I focus on new immigrants, i.e., those who arrive in the U.S. during the last five years. There are 8.3 million new immigrant workers (ages 20-64) in my sample, and they account for 18% of the total immigrant labor force (both old and new immigrants) and 2.7% of the entire labor force (natives plus all immigrants). Skilled new immigrants account for 2.1% of the total skilled labor force, and 1.8% of the entire labor force. Unskilled new immigrants account for 5.8% of the total unskilled labor force, and 0.9% of the entire labor force.

[Insert Table 1 about here]

Table 1 provides descriptive statistics for the samples corresponding to my various levels of analysis. Table 1 Panel A provides descriptive statistics for the projected and actual skill shares of new immigrants and for the skill share of the entire labor force. The projected skill share of new immigrants has a mean of 73% and a standard deviation of 16%. The actual skill share of the total labor force is higher than that of new immigrants. The actual skill share of the total labor force has a mean of 86% and a standard deviation of 6%.

[Insert Table 2 about here]

I first examine the extent to which the projected skill share of new immigrants that I construct can explain the actual skill share of new immigrants. Table 2 Panel A presents the results. For new immigrants, the projected skill share explains the actual skill share very well. Specifically, a unit increase in the projected skill share of new immigrants causes a roughly 0.8 unit increase in the actual skill share of new immigrants.

I then examine the extent to which the projected skill share of new immigrants can explain the actual skill share of the entire labor force. Table 2 Panel B presents the results, which again show that the new immigrant share does explain the entire labor force share quite well. In

particular, a 10 percentage point increase in the projected skill share of new immigrants causes a roughly 1 p.p. increase in the actual skill share of the entire labor force, which is equivalent to about 15%-20% of its standard deviation.

The preceding results suggest that there do not appear to be significant displacement effects between new immigrant and the rest of the labor force (natives and old immigrants). These findings are in line with a significant body of prior research that finds that immigrants have little or no crowding out effect on natives (e.g., Card and DiNardo (2000), Card (2001), Borjas (2006), and Card and Lewis (2007)). Overall, the projected skill share of new immigrants is a significant predictor of the actual skill share of the entire labor force, which validates its use as a shock to the skill structure of the labor force.

2.3. Data, Levels of Analysis, and Model Specifications

I use data from decennial censuses provided by IPUMS. My sample covers 177 cities and 72 countries. These cities and countries are used because data about them are publicly available. These 177 cities are metropolitan statistical areas covering approximately 70% of the U.S. population. Immigrants from these 72 countries account for approximately 85% of all immigrants to the U.S. as a whole.

I use SDC data for acquisition outcomes. I study acquisition outcomes over 15 years divided into three quinquennial periods, each of which is centered on the corresponding decennial census from 1990 to 2010. Each quinquennial period corresponding to a decennial census starts from the last year covered by the census and ends five years thereafter. I use the city in which a firm is headquartered as its location because firms tend to concentrate their management as well as their core competencies (e.g., R&D, production, etc.) around their headquarters location (to facilitate employee interactions, monitoring, etc.).

I perform my analysis at various levels, namely, industry-city, deal, and acquirer firm-event year, each of which I explain below. I design my regression specifications to account for factors that drive both the local skill structure of new immigrants and local acquisition activities today. My main analyses have a number of common features. I include city fixed effects in my specifications to control for any time-invariant factors that may drive both the projected skill structure and acquisition activity. Moreover, it is also possible that local economic conditions in 1960 not only directly affected the country-city shares at the time but also have some time-varying direct effect on acquisition activity today. To capture such time-varying factors, I use control variables for characteristics of the city's labor market in 1960 interacted with decennial fixed effects. Finally, to be very conservative, I also control for the city's current labor demand, which is the sum of the employment demand of all industries in the city, and it is projected by allocating U.S. employment each decade in each industry to each U.S. city based on industry-city shares in 1960.

3. Analysis of the Rate of Acquisitions

I first test the prediction that firms located in cities with a skilled immigrant labor force are more likely to become the target of an acquisition by a non-local firm.

3.1. Model Specification

I examine the rate of acquisitions at the industry-city-decennial census level. The equation for the baseline regressions is:

$$Y_{i,c,t} = \alpha \cdot Skill_Share_{c,t} + \beta_1 \cdot X_{i,c,t} + \beta_2 \cdot X_{c,t} + \delta_c + \delta_{i,t} + \varepsilon \quad (1)$$

where i indexes industries, c indexes cities, and t indexes the previously defined quinquennial periods. $Y_{i,c,t}$ is one of four measures of acquisition activity in industry i , in city c , in quinquennial period t . These outcomes comprise the number of deals, the total value of deals, the

average deal value, and the share of firms acquired. $Skill_Share_{c,t}$ is the skill share of new immigrants in city c at quinquennial period t . Industry-city control variables, $X_{c,i,t}$, are employment and employment growth of industry i in city c measured one year before quinquennial period t . City control variables, $X_{c,t}$, are historical characteristics of the city's labor market times decennial fixed effects and the city's current labor demand. I also include city fixed effects, δ_c , and industry-year fixed effects, $\delta_{i,t}$, to capture variation across industries and time. I cluster standard errors by industry-year and city-year. I winsorize variables whenever appropriate at the 1st and 99th percentiles.

3.2. Sample and Descriptive Statistics

Industries in the sample are two-digit SIC industries excluding financials and utilities. I exclude industry-city observations if the industry has no firms in the city. The sample comprises 30,059 observations, covering 62 two-digit SIC industries and 177 cities, in three quinquennial periods corresponding to three decennial censuses from 1990 to 2010. Data on industry-city characteristics are from the County Business Patterns database.

Returning to Table 1, Panel B of this table provides descriptive statistics for my sample at the industry-city-decennial census level. The project skill share of new immigrants is 73% with a standard deviation of 16%, similar to the corresponding figures in Panel A. Across my three quinquennial periods, the total number of deals is 0.35 deals on average; the total value of deals is \$76 million on average; the average deal value is \$28 million on average; and the share of firms acquired is 2% on average. All four measures take on a value of zero for much of their distribution but this is simply because only 16.5% of observations have at least one acquisition in a given industry, city, and quinquennial period.

3.3. Results

[Insert Table 3 about here]

Table 3 presents the results for the rate of acquisitions at the industry-city-decennial census level. Column 1 of each panel presents the baseline regression. Column 2 includes industry-city fixed effects to control for time-invariant factors within an industry in a city. I find that an increase in the skill share of new immigrants results in greater acquisition activity, whether measured by the number of deals (Panel A), total value of deals (Panel B), or average deal value (Panel C). The magnitudes are similar in column 1 and column 2, indicating that the effects are not affected by time-invariant industry-city factors.

Panel A shows that for a 10 percentage point increase in the projected skill share of new immigrants, the number of deals increase by about 6% relative to its mean and about 2% compared to its standard deviation. Panel B shows that for a 10 p.p. increase in the projected skill share of new immigrants, the total value of deals increase by about 7% relative to its mean and about 1.4% compared to its standard deviation. The coefficients in Panel C are also quite similar to those in Panel A and Panel B. Additionally, Panel D shows that the share of firms acquired also increases as a result of a higher projected skill share. A 10 p.p. increase in the skill share of new immigrants increases by 0.5 p.p. share of firms acquired, about 7% of its standard deviation. Overall, these results provide compelling evidence that a skilled local immigrant labor force increases local acquisition activity.

4. Analysis of Stock Returns Around Acquisition Announcements

Next, I test the prediction that acquirer shareholder value creation should be greater for acquisitions of target firms located in cities with a skilled immigrant labor force because these

acquisitions are more profitable for acquirer firms. To this end, I examine estimates of shareholder value creation at the announcement of the acquisition.

4.1. Model Specification

My analysis here is at the deal level. The equation for the baseline regressions is:

$$Y_{i,j,c,t} = \alpha \cdot Skill_Share_{c,t} + \beta_1 \cdot X_{i,t} + \beta_2 \cdot X_{c,t} + \delta_j + \delta_c + \delta_t + \varepsilon \quad (2)$$

where i indexes deals, j indexes industries, c indexes cities, and t indexes years. $Y_{i,j,c,t}$ is a deal-level outcome. It includes acquirer announcement stock returns and combined announcement stock returns measured during the five-day window centered on the acquisition announcement date. I also use three-day and seven-day windows for robustness and obtain similar inferences. $Skill_Share_{c,t}$ is the skill share of new immigrants in city of the target firm c .

$X_{i,t}$ are control variables for characteristics of the deal as well as the target and acquirer firms. For deal characteristics, the control variables are relative deal size, a diversifying deal dummy, a public target dummy, and a technology deal dummy. For target and acquirer firm characteristics, the control variables are total assets, market-to-book, net income-to-total assets, stock return volatility, and firm age.

$X_{c,t}$ are city-level control variables both the target and acquirer firms. For the target firm's city, I include historical characteristics of the city's labor market interacted with decennial fixed effects and the city's current labor demand. To be conservative, I also include the skill share of the entire labor force of the acquirer firm's city to separate the skill structure of the target firm's city from that of the acquirer firm's city.

Since both skill structure and acquisition activity may have variation in common across industries and time, I remove such variation using target industry fixed effects and acquirer industry fixed effects, where industry is captured by two-digit SIC codes. I control for time-

invariant factors by including city fixed effects for both the target and acquirer firms. Finally, standard errors are clustered by target industry-acquirer industry and target firm city.

4.2. Sample and Descriptive Statistics

The firms in this sample are U.S. operating firms excluding financials and utilities. Abnormal returns are from CRSP and firms' financial data are from Compustat. I identify deals that are announced during the three quinquennial periods corresponding to three decennial censuses from 1990 to 2010.

Returning to Table 1, Panel C of this table presents descriptive statistics for my sample. The sample includes 5,243 deals between a public acquirer firm and a public or private target firm. The projected skill share of new immigrants has a mean of 69% and a standard deviation of 15%. Acquirer returns have a mean of 1.5% and a standard deviation of 10.1%. The sample for combined returns includes 881 deals between a public acquirer firm and a public target firm. Combined returns have a mean of 2.9% and a standard deviation of 11.0%.

4.3. Results

[Insert Table 4 about here]

Table 4 presents the results. I first examine the stock returns of the acquirer firm. Panel A column 1 presents the results for all deals. Acquirer returns are higher as a result of a more skilled local immigrant labor force. For example, a 10 percentage point increase in the projected skill share of new immigrants increases acquirer stock returns by about 1.2 p.p., corresponding to roughly 10% of a standard deviation. Column 2 restricts the sample to only deals of public targets and includes target firm characteristics. The result in column 2 for the restricted sample is consistent with the result in column 1 but its magnitude is bigger.

Panel B shows that the combined returns of the acquirer and target (i.e., their value weighted stock returns) are also higher as a result of a more skilled local immigrant labor force. A 10 p.p. increase in the projected skill share of new immigrants increases combined stock returns by 3.9 p.p. The combined returns result indicates that the higher stock returns of acquirer firms are not merely a wealth transfer from targets to acquirers. Instead, the higher stock returns could be a reflection of higher growth opportunities for the acquirer alone, synergies between the acquirer and target firms themselves, or a correction of investors' undervaluation of the acquirer firm based on information revealed by the acquisition announcement. In all cases, the explanations are consistent with greater shareholder value creation as a result of a skilled local immigrant labor force.

5. Analysis of Profitability Resulting from Acquisitions

I test the prediction that acquisitions of target firms located in cities with a skilled immigrant labor force are more profitable for acquirer firms. To this end, I examine realized corporate performance after the acquisition.

5.1. Model Specification

I restrict the sample to publicly traded acquirers and examine the post-announcement change in the acquirer firm's financial outcomes by comparing each of the three years post-acquisition to the pre-acquisition period. For acquirer firms that make multiple acquisitions in a given year, I create a single pseudo deal that year for the acquirer firm (details below). Therefore, each acquirer firm in my sample has only one acquisition event in a given year.

The equation for the baseline regressions is:

$$\Delta Y_{i,j,k,c,t+n} = \alpha \cdot Skill_Share_{c,t} + \beta_1 \cdot X_{i,t-1} + \beta_2 \cdot X_{j,t} + \beta_3 \cdot X_{c,t} + \delta_{k,t} + \varepsilon \quad (3)$$

where i indexes firms, j indexes deals, k indexes industries, c indexes cities, t indexes years, and n indexes the number of years after the event. $\Delta Y_{i,j,k,c,t+n}$ is a change in some financial outcomes for the acquirer firm n years after the acquisition. The possible outcomes are changes in earnings, sales, cost of goods sold, and selling, general and administrative expenses (SG&A), scaled by either total assets or number of employees. I examine their changes one, two, and three years after the acquisition. $Skill_Share_{c,t}$ is the skill share of new immigrants in the target firm's city c in year t . For acquirer firms that make multiple acquisitions in a given year, $Skill_Share_{c,t}$ is the weighted average of the skill shares of new immigrants across all target firms, with the weights based on deal value.

$X_{i,t-1}$ are acquirer firm characteristics control variables before the event. Acquirer firm characteristics control variables are total assets, market-to-book, net income-to-total assets, stock return volatility, and firm age. Deal characteristic control variables, $X_{j,t}$, include relative deal size, number of diversifying deals, number of public target deals, number of technology deals. $X_{c,t}$ are city control variables for both the target and acquirer firm's cities. For the target firm's city, I control for historical characteristics of the city's labor market times decennial fixed effects and the city's current labor demand. For acquirer firms that make multiple acquisitions in a given year, these variables are calculated as a weighted average of the same variables using deal values as weights.

I also control for the skill share of the entire labor force of the acquirer firm's city. I include industry-year fixed effects, $\delta_{k,t}$, to capture the variation across industries and time. I do not include target city fixed effects in this analysis because I am comparing post-acquisition outcomes to pre-acquisition outcomes for the same acquirer firm. Finally, standard errors are clustered by industry. The results are robust to clustering by industry and target firm city, where

target firm city is the city of the target firm with which the acquirer firm has the biggest deal value in a given year.

5.2. Sample and Descriptive Statistics

The sample is restricted to deals that are completed in the three quinquennial periods corresponding to the three decennial censuses from 1990 to 2010. The firms in this sample are U.S. operating firms excluding financials and utilities. Returning to Table 1, Panel D of this table presents descriptive statistics for the sample.

The sample includes 2,002 firm-year observations for outcomes one year after the acquisition; 1,838 firm-year observations for outcomes two years after the acquisition; and 1,691 firm-year observations for outcomes three years after the acquisition. The projected skill share of target firms' cities is similar to that in the deal level analysis in Panel C. On average, earnings-to-total assets in the three years after acquisition are lower, with varying from -0.6% to -0.7%. Earnings-to-employee are higher, suggesting that each employee generates higher profits on average. For example, each employee generates more than \$6,500 in profit for the firm next year compare to the years before the acquisition. SG&A, which can be viewed as a proxy for labor related costs, is lower relative to total assets, but these costs are higher on a per employee basis.

5.3. Results

[Insert Table 5 about here]

Table 5 presents the results. I first examine the post-announcement change in the acquirer firm's profitability by comparing each of the three years post-acquisition to the pre-acquisition period. Panel A presents the results for profitability to total assets, and Panel B presents the results for profitability per employee. I find that the profitability of acquirers increases steadily during the three years after the acquisition, both overall and per employee. Specifically, a 10

percentage point increase in the projected skill share of new immigrants increase operating income by about 0.9 p.p. relative to total assets three years post-acquisition, and by roughly \$5,000 per employee, with each effect corresponding to roughly 6% of a standard deviation.

[Insert Table 6 about here]

Finally, I examine the sources of the post-acquisition increase in profitability by decomposing it into its sales and cost components. To this end, I decompose profitability into three components including sales, cost of goods sold, and SG&A. Table 6 presents the results. In the first three panels, the dependent variables are changes in a component of profitability scaled by total assets. In the last three panels, the dependent variables are scaled by employees rather than total assets. I do not find that sales increase, indicating that the shareholder value created by acquisitions cannot be attributed to greater market power in the product market.

However, I do find that both cost of goods sold and SG&A decrease, both overall and per employee. The results for SG&A are somewhat stronger, suggesting a decrease in labor related costs in particular. Specifically, a 10 p.p. increase in the projected skill share of new immigrants increases SG&A by about 1.2 p.p. relative to total assets three years post-acquisition, corresponding to 7% of a standard deviation, and by roughly \$1,800 per employee, corresponding to 4% of a standard deviation.¹⁴ Overall, the results indicate that the increase in profitability is attributable to the greater cost efficiency resulting from a skilled local immigrant labor force.

6. Conclusion

I study the corporate acquisition implications of immigration, specifically focusing on the skill structure of the immigrant labor force. I hypothesize that gaining access to a skilled

¹⁴ The coefficients of all components may not add up to the corresponding coefficients in Table 5 principally because of differences in sample size.

immigrant labor force generates growth opportunities and creates shareholder value. I argue that this can happen through greater productivity, lower wages, local agglomeration effects, or local multiplier effects.

In my empirical analysis, I use corporate acquisitions to study how firms gain access to a skilled labor force. To generate exogenous variation in the skill structure of new immigrants, I allocate skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. My identification is based on the tendency of immigrants to persistently settle in cities in which other immigrants from the same country have settled in the past. I classify individuals as skilled or unskilled using educational attainment.

My results show that a more skilled local immigrant labor force results in greater acquisition activity, whether measured by the volume or value of deals. Acquirer returns are also higher as a result of a more skilled local immigrant labor force, which suggests that investors anticipate an increase in the profitability of the acquirer. Additionally, the profitability of acquirers increases steadily during the three years after the acquisition, both overall and per employee. Finally, decomposing post-acquisition profitability into its sales and cost components, I do not find that sales increase, but costs do decrease, labor related costs in particular. This indicates that the increase in profitability is not attributable to greater market power but rather to greater cost efficiency. Taken as a whole, my findings suggest that skilled immigration has a positive impact on the corporate sector.

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Table 1
Descriptive Statistics

This table presents descriptive statistics for the main variables used in this paper. The samples in the four panels are described in the text. "City" refers to a metropolitan statistical area (MSA). Variables are defined in Appendix Table 1.

Panel A: Analysis of New Immigrant Skill Structure (City-Decennial Census Level) (Table 2)					
	Mean	Standard deviation	25 th percentile	Median	75 th percentile
Independent variables					
- Projected skill share of new immigrants (%)	73.0	16.4	62.7	77.5	85.6
Dependent variables					
- Actual skill share of new immigrants (%)	72.2	16.2	61.8	73.5	83.7
- Actual skill share of entire labor force (%)	85.6	5.7	82.6	86.6	89.6
Panel B: Analysis of the Rate of Acquisitions (Industry-City-Decennial Census Level) (Table 3)					
	Mean	Standard deviation	25 th percentile	Median	75 th percentile
Independent variables					
- Projected skill share of new immigrants (%)	73.2	16.4	62.8	77.7	85.6
Dependent variables					
- Number of deals	0.35	1.13	0.00	0.00	0.00
- Total value of deals (\$ millions)	76.2	376.9	0.0	0.0	0.0
- Average deal value (\$ millions)	28.1	121.5	0.0	0.0	0.0
- Share of firms acquired (%)	2.1	7.1	0.0	0.0	0.0
Panel C: Analysis of Stock Returns Around Acquisition Announcements (Deal Level) (Table 4)					
	Mean	Standard deviation	25 th percentile	Median	75 th percentile
Independent variables					
- Projected skill share of new immigrants (%)	69.2	14.5	58.2	72.4	82.3
Dependent variables					
- Acquirer acquisition announcement stock returns (%)	1.5	10.1	-3.5	0.6	5.4
- Combined acquisition announcement stock returns (%)	2.9	11.0	-2.6	1.2	6.8

Panel D: Analysis of Profitability Resulting from Acquisitions (Acquirer-Event Year Level) (Table 5 and Table 6)					
	Mean	Standard deviation	25 th percentile	Median	75 th percentile
Independent variables					
- Projected skill share of new immigrants (%)	69.4	14.4	60.0	72.8	81.9
Dependent variables					
- $\Delta(\text{EBITDA}/\text{TA})$ (%)					
- Year +1 vs. pre-acquisition	-0.67	14.30	-5.41	-0.86	3.71
- Year +2 vs. pre-acquisition	-0.59	15.77	-6.23	-1.01	3.98
- Year +3 vs. pre-acquisition	-0.69	15.55	-6.29	-0.94	4.11
- $\Delta(\text{EBITDA}/\text{Employee})$ (\$000s/Person)					
- Year +1 vs. pre-acquisition	6.5	69.7	-6.4	2.1	13.1
- Year +2 vs. pre-acquisition	11.0	77.8	-6.8	2.6	17.3
- Year +3 vs. pre-acquisition	11.7	81.4	-6.7	3.2	19.7
- $\Delta(\text{Sales}/\text{TA})$ (%)					
- Year +1 vs. pre-acquisition	-6.65	42.10	-23.28	-4.90	10.72
- Year +2 vs. pre-acquisition	-3.93	46.84	-24.43	-4.38	14.62
- Year +3 vs. pre-acquisition	-4.01	45.38	-26.18	-4.54	15.72
- $\Delta(\text{Sales}/\text{Employee})$ (\$000s/Person)					
- Year +1 vs. pre-acquisition	33.4	149.9	-8.5	17.5	56.0
- Year +2 vs. pre-acquisition	50.2	179.0	-1.6	25.0	71.5
- Year +3 vs. pre-acquisition	60.4	192.5	1.1	30.1	82.8
- $\Delta(\text{COGS}/\text{TA})$ (%)					
- Year +1 vs. pre-acquisition	-4.92	34.00	-15.80	-3.08	7.59
- Year +2 vs. pre-acquisition	-3.53	37.64	-17.60	-2.27	10.62
- Year +3 vs. pre-acquisition	-3.25	37.72	-18.57	-2.68	11.84
- $\Delta(\text{COGS}/\text{Employee})$ (\$000s/Person)					
- Year +1 vs. pre-acquisition	17.8	115.0	-6.8	9.1	31.8
- Year +2 vs. pre-acquisition	26.3	133.8	-3.9	14.5	38.2
- Year +3 vs. pre-acquisition	33.5	157.9	-3.1	16.0	46.5
- $\Delta(\text{SG\&A}/\text{TA})$ (%)					
- Year +1 vs. pre-acquisition	-1.55	15.57	-6.25	-1.17	2.88
- Year +2 vs. pre-acquisition	-0.83	17.37	-7.06	-0.95	3.41
- Year +3 vs. pre-acquisition	-1.20	17.03	-6.99	-1.10	4.13
- $\Delta(\text{SG\&A}/\text{Employee})$ (\$000s/Person)					
- Year +1 vs. pre-acquisition	7.3	38.3	-3.0	3.3	15.4
- Year +2 vs. pre-acquisition	9.2	41.0	-1.6	5.2	19.3
- Year +3 vs. pre-acquisition	12.4	44.8	-1.3	6.3	22.7

Table 2
The Effect of New Immigrant Skill Structure on Actual Labor Force Skill Structure

This table shows the results of regressions of the skill share of the actual labor force on the projected skill share of new immigrants. The regressions follow Equation 1. The unit of observation is the city-decennial census. The sample and specifications are described in the text. The projected skill share of new immigrants is constructed by allocating skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. This projected skill share excludes actual immigration flows in a given decade to a given city, and the specifications used also remove time-invariant differences between cities, time-varying historical characteristics of the city, and the city's current labor demand. Variables are defined in Appendix Table 1. "City" refers to a metropolitan statistical area (MSA). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: The Effect on Actual Skill Share of New Immigrants		
	Dependent variable is actual skill share of new immigrants	
	Without city's current economic conditions	With city's current economic conditions
Projected skill share of new immigrants	0.835*** (4.41)	0.758*** (5.08)
Control variables for city's current economic conditions?	No	Yes
City fixed effects?	Yes	Yes
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Observations	493	493
Adjusted R ²	0.669	0.683
Panel B: The Effect on Actual Skill Share of Entire Labor Force		
	Dependent variable is actual skill share of entire labor force	
	Without city's current economic conditions	With city's current economic conditions
Projected skill share of new immigrants	0.101** (2.51)	0.128*** (3.83)
Control variables for city's current economic conditions?	No	Yes
City fixed effects?	Yes	Yes
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Observations	493	493
Adjusted R ²	0.939	0.954

Table 3
The Effect of New Immigrant Skill Structure on the Rate of Acquisitions of Local Target Firms by Non-Local Acquirer Firms

This table shows the results of regressions of measures of acquisition activity on the projected skill share of new immigrants in the same city. The regressions follow Equation 2. The unit of observation is the industry-city-decennial census. The sample and specifications are described in the text. The projected skill share of new immigrants is constructed by allocating skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. This projected skill share excludes actual immigration flows in a given decade to a given city, and the specifications used also remove time-invariant differences between cities, time-varying historical characteristics of the city, and the city's current labor demand. Variables are defined in Appendix Table 1. "City" refers to a metropolitan statistical area (MSA). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Activity Measured Using Number of Deals		
	Dependent variable is number of deals	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.628** (2.42)	0.610* (1.71)
Control variables for industry-city characteristics?	Yes	Yes
Industry-year fixed effects?	Yes	Yes
Industry-city fixed effects?	No	Yes
City fixed effects?	Yes	(Yes)
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Observations	29,296	28,761
Adjusted R ²	0.370	0.504
Panel B: Activity Measured Using Total Value of Deals		
	Dependent variable is total value of deals	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.703*** (3.13)	0.653* (1.82)
Control variables for industry-city characteristics?	Yes	Yes
Industry-year fixed effects?	Yes	Yes
Industry-city fixed effects?	No	Yes
City fixed effects?	Yes	(Yes)
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Observations	29,296	28,761
Adjusted R ²	0.352	0.516

Panel C: Activity Measured Using Average Deal Value		
	Dependent variable is average deal value	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.687*** (3.22)	0.629* (1.91)
Control variables for industry-city characteristics?	Yes	Yes
Industry-year fixed effects?	Yes	Yes
Industry-city fixed effects?	No	Yes
City fixed effects?	Yes	(Yes)
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Observations	29,296	28,761
Adjusted R ²	0.319	0.449
Panel D: Activity Measured Using Share of Firms Acquired		
	Dependent variable is share of firms acquired	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.047*** (3.31)	0.041** (2.23)
Control variables for industry-city characteristics?	Yes	Yes
Industry-year fixed effects?	Yes	Yes
Industry-city fixed effects?	No	Yes
City fixed effects?	Yes	(Yes)
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Observations	24,963	23,990
Adjusted R ²	0.164	0.279

Table 4
The Effect of New Immigrant Skill Structure on Stock Returns Around Announcements of Acquisitions of Local Target Firms by Non-Local Acquirer Firms

This table shows the results of regressions of stock returns around acquisition announcements on the projected skill share of new immigrants. The regressions follow Equation 3. The unit of observation is the deal. The sample and specifications are described in the text. The projected skill share of new immigrants is constructed by allocating skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. This projected skill share excludes actual immigration flows in a given decade to a given city, and the specifications used also remove time-invariant differences between cities, time-varying historical characteristics of the city, and the city's current labor demand. Variables are defined in Appendix Table 1. "City" refers to a metropolitan statistical area (MSA). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Acquirers Only		
	Dependent variable is acquisition announcement stock returns	
	Both public and private targets	Public targets only
Target's projected skill share of new immigrants	0.122** (2.51)	0.336* (1.74)
Control variables for deal characteristics?	Yes	Yes
Year FEs?	Yes	Yes
Target variables:		
Control variables for firm characteristics?	No	Yes
Industry fixed effects?	Yes	Yes
City fixed effects?	Yes	Yes
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Acquirer variables:		
Control variables for firm characteristics?	Yes	Yes
Industry fixed effects?	Yes	Yes
City fixed effects?	Yes	Yes
Control variable for actual skill share of entire labor force?	Yes	Yes
Observations	5,203	697
Adjusted R ²	0.023	0.013

Panel B: Acquirers and Targets Combined		
	Dependent variable is acquisition announcement stock returns	
	Both public and private targets	Public targets only
Target's projected skill share of new immigrants	0.387** (2.21)	0.394** (2.27)
Control variables for deal characteristics?	Yes	Yes
Year fixed effects?	Yes	Yes
Target variables:		
Control variables for firm characteristics?	Yes	Yes
Industry fixed effects?	Yes	Yes
City fixed effects?	Yes	Yes
Control variables for historical characteristics of city's labor market × Decennial FEs?	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes
Acquirer variables:		
Control variables for firm characteristics?	No	Yes
Industry fixed effects?	No	Yes
City fixed effects?	No	Yes
Control variable for actual skill share of entire labor force?	No	Yes
Observations	853	683
Adjusted R ²	0.021	0.038

Table 5
The Effect of New Immigrant Skill Structure on Profitability Resulting from Acquisitions of Local Target Firms by Non-Local Acquirer Firms

This table shows the results of regressions of the post-acquisition change in profitability on the projected skill share of new immigrants. The regressions follow Equation 4. The unit of observation is the acquirer-event year. The sample and specifications are described in the text. The projected skill share of new immigrants is constructed by allocating skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. This projected skill share excludes actual immigration flows in a given decade to a given city, and the specifications used also remove time-invariant differences between cities, time-varying historical characteristics of the city, and the city's current labor demand. Variables are defined in Appendix Table 1. "City" refers to a metropolitan statistical area (MSA). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Profitability Measured Using EBITDA/TA			
	Dependent variable is $\Delta(\text{EBITDA/TA})$ relative to pre-acquisition period		
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	3.262 (1.05)	6.512* (1.85)	8.646** (2.58)
Control variables for deal characteristics?	Yes	Yes	Yes
Target variables:			
Control variables for historical characteristics of city's labor market \times Decennial FEs?	Yes	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes	Yes
Acquirer variables:			
Control variables for firm characteristics?	Yes	Yes	Yes
Industry-year fixed effects?	Yes	Yes	Yes
Control variable for actual skill share of labor force?	Yes	Yes	Yes
Observations	1,743	1,585	1,448
Adjusted R ²	0.058	0.089	0.094
Panel B: Profitability Measured Using EBITDA/Employee			
	Dependent variable is $\Delta(\text{EBITDA/Employee})$ relative to pre-acquisition period		
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	14.722 (0.63)	41.749*** (2.78)	51.853*** (3.38)
Control variables for deal characteristics?	Yes	Yes	Yes
Target variables:			
Control variables for historical characteristics of city's labor market \times Decennial FEs?	Yes	Yes	Yes
Control variable for city's current labor demand?	Yes	Yes	Yes
Acquirer variables:			
Control variables for firm characteristics?	Yes	Yes	Yes
Industry-year fixed effects?	Yes	Yes	Yes
Control variable for actual skill share of labor force?	Yes	Yes	Yes
Observations	1,708	1,554	1,425
Adjusted R ²	0.130	0.267	0.264

Table 6
The Effect of New Immigrant Skill Structure on Sales and Costs Resulting from Acquisitions of Local Target Firms by Non-Local Acquirer Firms

This table shows the results of regressions of the post-acquisition change in sales and costs on the projected skill share of new immigrants. The regressions are the same as in Table 5 but with different dependent variables. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Dependent Variable is $\Delta(\text{Sales}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-1.303 (-0.21)	-1.813 (-0.21)	-14.360** (-2.04)
Observations	1,747	1,588	1,451
Adjusted R ²	0.074	0.088	0.097
Panel B: Dependent Variable is $\Delta(\text{COGS}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-6.403 (-1.15)	-9.021 (-1.03)	-19.242** (-2.10)
Observations	1,747	1,588	1,451
Adjusted R ²	0.060	0.061	0.089
Panel C: Dependent Variable is $\Delta(\text{SG}\&\text{A}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-1.797 (-0.86)	-3.718 (-1.50)	-11.890*** (-4.07)
Observations	1,559	1,415	1,290
Adjusted R ²	0.024	0.021	-0.006
Panel D: Dependent Variable is $\Delta(\text{Sales}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-9.782 (-0.26)	4.982 (0.22)	15.683 (0.49)
Observations	1,711	1,557	1,427
Adjusted R ²	0.176	0.250	0.219
Panel E: Dependent Variable is $\Delta(\text{COGS}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-12.828 (-0.62)	-25.593 (-1.04)	-19.231 (-0.60)
Observations	1,711	1,557	1,427
Adjusted R ²	0.068	0.068	0.042
Panel F: Dependent Variable is $\Delta(\text{SG}\&\text{A}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-9.391* (-1.95)	-17.722** (-2.50)	-17.873** (-2.17)
Observations	1,528	1,387	1,269
Adjusted R ²	0.087	0.063	0.020

**Appendix Table 1
Variable Definitions**

"City" refers to a metropolitan statistical area (MSA).

Variables Common to All Regressions	
Name	Definition
Skill structure variables	
- Projected skill share of new immigrants	The proportion of people with a high school diploma within the new immigrant labor force (persons 20 to 64 years old), projected by allocating skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. New immigrants are those who arrived in the U.S. in the last five years.
- Actual skill share of new immigrants	The proportion of people with a high school diploma within the new immigrant labor force (persons 20 to 64 years old). New immigrants are those who arrived in the U.S. in the last five years.
- Actual skill share of entire labor force	The proportion of people with a high school diploma within the entire labor force (persons 20 to 64 years old). The entire labor force comprises natives and all immigrants.
Control variables	
- Historical characteristics of city's labor market	
- Labor force size	The labor force (persons 20 to 64 years old) of a city in 1960. Used in logarithms.
- Employment rate	The share of the labor force that is employed in 1960
- Average wages	Average wage of workers in 1960. Used in logarithms.
- City's current labor demand	The sum of employment demand of all industries in the city, projected by allocating U.S. employment each decade (1990-2010) in each industry to each U.S. city based on historical (1960) industry-city shares. Used in logarithms.
Analysis of New Immigrant Skill Structure (City-Decennial Census Level) (Table 2)	
Name	Definition
Control variables	
- City's current economic conditions	
- Population	The population of a city. Used in logarithms.
- Income per capita	The income per capita of a city. Used in logarithms.
- Growth rate of total income	The growth rate of the total income of a city

Analysis of the Rate of Acquisitions (Industry-City-Decennial Census Level) (Table 3)	
Name	Definition
Dependent variables	
- Number of deals	The number of acquisitions of local target firms by non-local acquirer firms. Measured in a given industry and a given city. Used in logarithms.
- Total value of deals	The total value of acquisitions of local target firms by non-local acquirer firms. Measured in a given industry and a given city. Used in logarithms.
- Average deal value	The average value per deal of acquisitions of local target firms by non-local acquirer firms. Measured in a given industry and a given city. Used in logarithms.
- Share of firms acquired	The proportion of local firms that are acquired by non-local firms. The sample of local firms is restricted to firms with at least 50 employees. Measured in a given industry and a given city.
Control variables	
- Industry-city characteristics	
- Employment	The number of people employed in a given industry and a given city. Used in logarithms.
- Employment growth	The growth rate of the employment in a given industry and a given city
Analysis of Stock Returns Around Acquisition Announcements (Deal Level) (Table 4)	
Name	Definition
Dependent variables	
- Acquirer announcement stock returns	The cumulative abnormal return of the acquirer firm during the five-day window centered on the acquisition announcement date. Abnormal returns are calculated using the market model estimated during the [-210,-11] window relative to the announcement date and requiring at least 60 observations.
- Combined announcement stock returns	The weighted average cumulative abnormal return of the combined acquirer and target firms during the five-day window centered on the acquisition announcement date. The weights are the relative market values of the acquirer and target firms measured 10 days before the announcement date.
Control variables	
- Deal characteristics	
- Relative deal size	The ratio of the value of the deal to the acquirer firm's market value
- Diversifying deal	Dummy variable for whether the acquirer firm and the target firm are from different two-digit SIC industries
- Public target	Dummy variable for whether the target firm is a publicly traded firm
- Technology deal	Dummy variable for whether both the acquirer firm and the target firm are technology firms. Technology firms are firms that have two-digit SIC codes of 28, 35, 36, 73, and 87.
- Target and acquirer characteristics	
- Total assets	AT from Compustat
- Market-to-book	$(AT - (TXDITC + CEQ) + PRCC_F \times CSHO) / AT$ from Compustat
- Net income-to-total assets	NI/AT from Compustat
- Stock return volatility	Annualized standard deviation of daily stock returns
- Firm age	Firm age measured from the date the firm begins trading publicly in CRSP
- Acquirer's actual skill structure of labor force	The share of people of the acquire firm's city with a high school diploma of the entire labor force

Analysis of Profitability Resulting from Acquisitions (Acquirer-Event Year Level) (Table 5 and Table 6)	
Name	Definition
Dependent variables	
- $\Delta(\text{EBITDA}/\text{TA})$	The ratio of operating income to total assets in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
- $\Delta(\text{EBITDA}/\text{Employee})$	The ratio of operating income to number of employees in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
- $\Delta(\text{Sales}/\text{TA})$	The ratio of sales to total assets in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
- $\Delta(\text{Sales}/\text{Employee})$	The ratio of sales to number of employees in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
- $\Delta(\text{COGS}/\text{TA})$	The ratio of cost of goods sold to total assets in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
- $\Delta(\text{COGS}/\text{Employee})$	The ratio of cost of goods sold to number of employees in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
- $\Delta(\text{SG\&A}/\text{TA})$	The ratio of selling, general, and administrative expenses to total assets in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
- $\Delta(\text{SG\&A}/\text{Employee})$	The ratio of selling, general, and administrative expenses to number of employees in post-acquisition year +1, +2, or +3 vs. the average of the three pre-acquisition years. Measured for acquirer firms.
Control variables	
- Deal characteristics	
- Relative deal size	The ratio of the value of all deals that the acquirer firm makes in a given year to the acquirer firm's market value
- Diversifying deal	The number of deals in which the acquirer firm and the target firm are from different two-digit SIC industries
- Public target	The number of deals in which the target firm is a publicly traded firm
- Technology deal	The number of deals in which both the acquirer firm and the target firm are technology firms. Technology firms are firms that have two-digit SIC codes of 28, 35, 36, 73, and 87.
- Acquirer characteristics	
- Total assets	AT from Compustat
- Market-to-book	$(\text{AT} - (\text{TXDITC} + \text{CEQ}) + \text{PRCC}_F \times \text{CSHO}) / \text{AT}$ from Compustat
- Net income-to-total assets	NI/AT from Compustat
- Stock return volatility	Annualized standard deviation of daily stock returns
- Firm age	Firm age measured from the date the firm begins trading publicly in CRSP
- Acquirer's actual skill share of entire labor force	The proportion of people with a high school diploma within the labor force of the acquirer's city

Appendix Table 2

The Effect of New Immigrant Skill Structure on the Rate of Acquisitions of Local Target Firms by Non-Local Acquirer Firms (Table 3): Instrumental Variables

This table shows the results of instrumental variables regressions of measures of acquisition activity on the actual skill share of the entire labor force in the same city. The regressions are the same as in Table 3 but the actual skill share of the entire labor force is instrumented with the projected skill share of new immigrants. The projected skill share of new immigrants is constructed by allocating skilled and unskilled U.S. immigration flows each decade (1990-2010) from each foreign country to each U.S. city based on historical (1960) country-city settlement patterns. This projected skill share excludes actual immigration flows in a given decade to a given city, and the specifications used also remove time-invariant differences between cities, time-varying historical characteristics of the city, and the city's current labor demand. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Activity Measured Using Number of Deals		
	Dependent variable is number of deals	
	Without industry-city fixed effects	With industry-city fixed effects
Instrumented skill share of entire labor force	9.233* (1.88)	9.024** (2.05)
Observations	28,140	27,561
Adjusted R ²	0.370	0.497
Panel B: Activity Measured Using Total Value of Deals		
	Dependent variable is total value of deals	
	Without industry-city fixed effects	With industry-city fixed effects
Instrumented skill share of entire labor force	10.430** (2.19)	9.765** (2.13)
Observations	28,140	27,561
Adjusted R ²	0.350	0.507
Panel C: Activity Measured Using Share of Firms Acquired		
	Dependent variable is share of firms acquired	
	Without industry-city fixed effects	With industry-city fixed effects
Instrumented skill share of entire labor force	0.675*** (2.75)	0.548** (2.32)
Observations	24,182	23,189
Adjusted R ²	0.156	0.270
Panel D: Activity Measured Using Average Deal Value		
	Dependent variable is average deal value	
	Without industry-city fixed effects	With industry-city fixed effects
Instrumented skill share of entire labor force	10.259** (2.38)	9.475** (2.20)
Observations	28,140	27,561
Adjusted R ²	0.316	0.439

Appendix Table 3
The Effect of New Immigrant Skill Structure on Profitability Resulting from Acquisitions of Local Target Firms by Non-Local Acquirer Firms (Table 5): The Role of Deal Size

This table shows the results of regressions of the post-acquisition change in profitability on the projected skill share of new immigrants. The regressions are the same as in Table 5 but using samples attaining various deal size restrictions. Deal size is measured for a given acquirer-event year as the ratio of total deal value to the acquirer's market capitalization during the previous year. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Minimum Deal Size of 30% and Profitability Measured Using EBITDA/TA			
Dependent variable is $\Delta(\text{EBITDA}/\text{TA})$ relative to pre-acquisition period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	11.146* (1.73)	15.712* (1.96)	16.186** (2.16)
Observations	732	659	607
Adjusted R ²	0.102	0.111	0.109
Panel B: Minimum Deal Size of 30% and Profitability Measured Using EBITDA/Employee			
Dependent variable is $\Delta(\text{EBITDA}/\text{Employee})$ relative to pre-acquisition period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	20.188 (0.63)	66.057** (2.73)	82.947** (2.35)
Observations	712	640	591
Adjusted R ²	0.143	0.382	0.308
Panel C: Minimum Deal Size of 50% and Profitability Measured Using EBITDA/TA			
Dependent variable is $\Delta(\text{EBITDA}/\text{TA})$ relative to pre-acquisition period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	21.748** (2.72)	26.848** (2.67)	28.444*** (3.00)
Observations	418	378	347
Adjusted R ²	0.113	0.090	0.106
Panel D: Minimum Deal Size of 50% and Profitability Measured Using EBITDA/Employee			
Dependent variable is $\Delta(\text{EBITDA}/\text{Employee})$ relative to pre-acquisition period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	75.464* (1.82)	158.012*** (4.02)	177.113*** (4.09)
Observations	405	365	334
Adjusted R ²	0.093	0.290	0.283

Appendix Table 4**The Effect of New Immigrant Skill Structure on Sales and Costs Resulting from Acquisitions of Local Target Firms by Non-Local Acquirer Firms (Table 6): The Role of Deal Size**

This table shows the results of regressions of the post-acquisition change in sales and costs on the projected skill share of new immigrants. The regressions are the same as in Table 6 but using samples attaining various deal size restrictions. Deal size is measured for a given acquirer-event year as the ratio of total deal value to the acquirer's market capitalization during the previous year. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Minimum Deal Size of 30% and Dependent Variable is $\Delta(\text{Sales}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	3.174 (0.23)	1.398 (0.12)	-6.754 (-0.67)
Observations	735	662	610
Adjusted R ²	0.091	0.064	0.064
Panel B: Minimum Deal Size of 30% and Dependent Variable is $\Delta(\text{COGS}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-9.733* (-1.88)	-15.041 (-1.47)	-18.460* (-1.78)
Observations	735	662	610
Adjusted R ²	0.116	0.073	0.059
Panel C: Minimum Deal Size of 30% and Dependent Variable is $\Delta(\text{SG\&A}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-5.725 (-1.34)	-11.215* (-1.91)	-17.219*** (-3.45)
Observations	628	564	513
Adjusted R ²	0.068	0.003	0.024
Panel D: Minimum Deal Size of 30% and Dependent Variable is $\Delta(\text{Sales}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-14.538 (-0.28)	4.831 (0.08)	5.214 (0.06)
Observations	715	643	593
Adjusted R ²	0.194	0.302	0.267
Panel E: Minimum Deal Size of 30% and Dependent Variable is $\Delta(\text{COGS}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-19.900 (-0.59)	-26.012 (-0.65)	-52.995 (-1.22)
Observations	715	643	593
Adjusted R ²	0.090	0.084	0.063
Panel F: Minimum Deal Size of 30% and Dependent Variable is $\Delta(\text{SG\&A}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-28.313*** (-3.25)	-48.552*** (-4.15)	-49.174*** (-3.17)
Observations	610	553	502
Adjusted R ²	-0.007	-0.025	0.024

Panel G: Minimum Deal Size of 50% and Dependent Variable is $\Delta(\text{Sales}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	3.803 (0.28)	5.847 (0.27)	-1.385 (-0.07)
Observations	421	381	350
Adjusted R ²	0.120	0.099	0.067
Panel H: Minimum Deal Size of 50% and Dependent Variable is $\Delta(\text{COGS}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-13.142 (-1.14)	-16.208 (-0.65)	-17.777 (-0.80)
Observations	421	381	350
Adjusted R ²	0.157	0.074	0.058
Panel I: Minimum Deal Size of 50% and Dependent Variable is $\Delta(\text{SG\&A}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-16.070*** (-3.49)	-18.385* (-1.83)	-29.513*** (-3.04)
Observations	348	308	279
Adjusted R ²	0.066	-0.002	0.062
Panel J: Minimum Deal Size of 50% and Dependent Variable is $\Delta(\text{Sales}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	2.692 (0.03)	88.434 (0.82)	96.277 (0.77)
Observations	408	368	336
Adjusted R ²	0.165	0.237	0.142
Panel K: Minimum Deal Size of 50% and Dependent Variable is $\Delta(\text{COGS}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-21.014 (-0.28)	19.150 (0.24)	17.439 (0.16)
Observations	408	368	336
Adjusted R ²	0.073	0.064	-0.011
Panel L: Minimum Deal Size of 50% and Dependent Variable is $\Delta(\text{SG\&A}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-64.910*** (-3.55)	-100.606*** (-3.64)	-107.909*** (-5.87)
Observations	341	302	271
Adjusted R ²	0.039	0.008	0.125

Appendix Table 5

The Effect of New Immigrant Skill Structure on the Rate of Acquisitions of Local Target Firms by Non-Local Acquirer Firms (Table 3): Unskilled-Skilled Threshold Defined Using College Degree

This table shows the results of regressions of measures of acquisition activity on the projected skill share of new immigrants in the same city. The regressions are the same as in Table 3, but the unskilled-skilled threshold is defined using college degrees rather than high school diplomas. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Activity Measured Using Number of Deals		
	Dependent variable is number of deals	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.694*** (2.67)	0.530** (2.25)
Observations	29,296	28,761
Adjusted R ²	0.370	0.504
Panel B: Activity Measured Using Total Value of Deals		
	Dependent variable is total value of deals	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.480** (1.99)	0.327 (1.53)
Observations	29,296	28,761
Adjusted R ²	0.352	0.516
Panel C: Activity Measured Using Share of Firms Acquired		
	Dependent variable is share of firms acquired	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.027** (2.18)	0.020 (1.50)
Observations	24,963	23,990
Adjusted R ²	0.163	0.279
Panel D: Activity Measured Using Average Deal Value		
	Dependent variable is average deal value	
	Without industry-city fixed effects	With industry-city fixed effects
Projected skill share of new immigrants	0.429** (1.98)	0.282 (1.39)
Observations	29,296	28,761
Adjusted R ²	0.319	0.449

Appendix Table 6
The Effect of New Immigrant Skill Structure on Stock Returns Around Announcements of Acquisitions of Local Target Firms by Non-Local Acquirer Firms (Table 4): Unskilled-Skilled Threshold Defined Using College Degree

This table shows the results of regressions of stock returns around acquisition announcements on the projected skill share of new immigrants. The regressions are the same as in Table 4, but the unskilled-skilled threshold is defined using college degrees rather than high school diplomas. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Acquirers Only		
	Dependent variable is acquisition announcement stock returns	
	Both public and private targets	Public targets only
Target's projected skill share of new immigrants	0.161** (2.50)	0.385* (1.94)
Observations	5,203	697
Adjusted R ²	0.024	0.010
Panel B: Acquirers and Targets Combined		
	Dependent variable is acquisition announcement stock returns	
	Both public and private targets	Public targets only
Target's projected skill share of new immigrants	0.582*** (3.75)	0.591*** (3.60)
Observations	853	683
Adjusted R ²	0.038	0.054

Appendix Table 7

The Effect of New Immigrant Skill Structure on Profitability Resulting from Acquisitions of Local Target Firms by Non-Local Acquirer Firms (Table 5): Unskilled-Skilled Threshold Defined Using College Degree

This table shows the results of regressions of the post-acquisition change in profitability on the projected skill share of new immigrants. The regressions are the same as in Table 5, but the unskilled-skilled threshold is defined using college degrees rather than high school diplomas. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Profitability Measured Using EBITDA/TA			
	Dependent variable is $\Delta(\text{EBITDA/TA})$ relative to pre-acquisition period		
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	3.211 (0.87)	7.787** (2.08)	9.548** (2.38)
Observations	1,743	1,585	1,448
Adjusted R ²	0.058	0.089	0.095
Panel B: Profitability Measured Using EBITDA/Employee			
	Dependent variable is $\Delta(\text{EBITDA/Employee})$ relative to pre-acquisition period		
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	18.265 (0.67)	45.267** (2.49)	57.852*** (3.20)
Observations	1,708	1,554	1,425
Adjusted R ²	0.130	0.266	0.264

Appendix Table 8**The Effect of New Immigrant Skill Structure on Sales and Costs Resulting from Acquisitions of Local Target Firms by Non-Local Acquirer Firms (Table 6): Unskilled-Skilled Threshold Defined Using College Degree**

This table shows the results of regressions of the post-acquisition change in sales and costs on the projected skill share of new immigrants. The regressions are the same as in Table 6, but the unskilled-skilled threshold is defined using college degrees rather than high school diplomas. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Dependent Variable is $\Delta(\text{Sales}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	5.063 (0.77)	0.345 (0.03)	-15.168* (-1.69)
Observations	1,747	1,588	1,451
Adjusted R ²	0.074	0.087	0.095
Panel B: Dependent Variable is $\Delta(\text{COGS}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-0.991 (-0.17)	-8.148 (-0.84)	-19.887* (-1.94)
Observations	1,747	1,588	1,451
Adjusted R ²	0.059	0.061	0.086
Panel C: Dependent Variable is $\Delta(\text{SG}\&\text{A}/\text{TA})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-0.246 (-0.10)	-3.486 (-1.41)	-13.544*** (-4.79)
Observations	1,559	1,415	1,290
Adjusted R ²	0.024	0.021	-0.008
Panel D: Dependent Variable is $\Delta(\text{Sales}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-5.380 (-0.14)	0.515 (0.02)	15.863 (0.42)
Observations	1,711	1,557	1,427
Adjusted R ²	0.177	0.251	0.219
Panel E: Dependent Variable is $\Delta(\text{COGS}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-10.907 (-0.48)	-31.858 (-0.93)	-21.210 (-0.53)
Observations	1,711	1,557	1,427
Adjusted R ²	0.068	0.067	0.041
Panel F: Dependent Variable is $\Delta(\text{SG}\&\text{A}/\text{Employee})$ Relative to Pre-Acquisition Period			
	Year +1	Year +2	Year +3
Target's projected skill share of new immigrants	-6.454 (-1.00)	-19.832** (-2.30)	-17.222** (-2.11)
Observations	1,528	1,387	1,269
Adjusted R ²	0.090	0.064	0.019