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Working Paper 21-055

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Abstract

On June 22, 2020, President Trump issued an Executive Order (EO) that suspended new work visas, barring nearly 200,000 foreign workers and their dependents from entering the United States and preventing American companies from hiring skilled immigrants using H-1B or L1 visas. Exploiting this shock, and using event study methodology analyzing the cumulative average abnormal returns (CAARs) of Fortune 500 companies following this order, we find that the EO statistically and economically significantly caused negative CAARs of up to 0.45%, the equivalent of over 100 billion of US dollars of losses, based on the firms' valuation before the event. Our results are particularly pronounced for firms that had maintained or increased their reliance on skilled immigrant workers over the prior years.

Keywords: immigration, visa, foreign workers, Fortune 500
JEL Classification Numbers: G14, G38, J61

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1 Introduction

On June 22, 2020 an Executive Order (EO) was issued by the President of the United States, Donald J. Trump, restricting the entry of individuals seeking to enter the country on a non-immigrant work visa.[1] According to estimates, this EO barred entrance of about 200,000 foreign workers and their dependents (Chishti et al., 2020). Unlike immigrant visas, which grant individuals permanent residency in the U.S. and are primarily granted for purposes of family reunification, non-immigrant visas are primarily granted in response to demand from firms and are both employment-based and temporary.[2] [3] Of direct relevance to the Fortune 500 companies that we focus on in this paper is the EO's ban of new H-1B and L1 visas, both of which are used by American companies to hire or transfer high-skilled immigrants.[4] Kerr et al. (2015) document that almost all beneficiaries of the H-1B visa have a college degree and typically about half of the temporary foreign workers have completed a graduate degree. Many also work in information technology and STEM, which accounted for over 70 percent of all successful visa applications in the 2012 fiscal year.

In this paper, we study the immediate economic impact of this EO on the largest U.S. firms by estimating the cumulative average abnormal stock returns for Fortune 500 firms in response to the policy announcement. We find that the June 22 shock eroded the market valuation of the 471 companies in our sample by an estimated 100 billion of US dollars.

We arrive at these conclusions by estimating the cumulative average abnormal returns of Fortune 500 companies following the EO, based on the event study methodology, a workhorse method introduced by Fama et al. (1969) and used extensively in the economics and finance literature (Binder, 1985; Schoar and Zuo, 2016). Our baseline results show that in the days that followed the

[1] Source: https://www.whitehouse.gov/presidential-actions/proclamation-suspending-entry-aliens-present-risk-u-s-labor-market-following-coronavirus-outbreak/

[2] Among other visa categories, non-immigrant visas included visas related to "specialty occupations in fields requiring highly specialized knowledge" (H-1B visas), intra-company transfers (L visas), and exchange visitors (J visas).Source: https://travel.state.gov/content/travel/en/us-visas/visa-information-resources/all-visa-categories.html

[3] Leiden and Neal (1990) summarize how the U.S. Immigration Act of 1990 created three categories of visas, focused on three priorities: family-reunification, employment and diversity. The same act created quotas for family-reunification visas and for employment. The 1990 Act also created the H1-B visa category.

[4] The L1 visa allows American companies with global operations to temporarily transfer foreign managers and employees to their American offices

EO, the firms in our sample –known to rely extensively on immigrant labor– lost about 0.45% of their value based on abnormal stock returns. We further find that this negative shock was common on firms regardless of their economic activity and was much stronger for firms that have maintained or increased their reliance on foreign workers during the years prior to the EO (as measured by each firm's Labor Condition Application requests which proxies demand for H1B visas).

In reporting this finding, this paper contributes with additional novel evidence to the ongoing debate surrounding immigration policy focused on attracting skilled temporary workers.

A number of empirical papers in the existing literature find that skilled immigration improves firm outcomes such as total factor productivity (Mitaritonna et al., 2017), production expansion (Olney, 2013), innovation (Kerr and Lincoln, 2010; Choudhury and Kim, 2019; Beerli et al., 2018), FDI (Foley and Kerr, 2013), and profits (Mayda et al., 2020).[5] Other studies such as Doran et al. (2020) present more conservative evidence on the value of temporary worker programs, more specifically the H1B visa program, to U.S. firms. Doran et al. (2020) document that for U.S. firms, winning marginal H1B visas through the H1B lottery has insignificant effects on productivity and innovation outcomes, such as firms' patenting and use of the research and experimentation tax credit. However, Doran et al. (2020) do present some evidence that securing additional H1B visas lead to higher firm profitability.

Our study contributes to this active debate surrounding whether or not, and to what extent, skilled work visas create value for firms, by examining the short-run impacts of skilled immigration restrictions on firms' stock market valuations. Our results support the hypothesis, first posited by Kerr and Lincoln (2010), that restrictions on skilled visas represent a supply shock to U.S. firms. While there may be longer run adjustments –such as offshoring, documented by Glennon (2020)– that U.S. firms can make when their access to skilled labor supply is abruptly constrained, one would also expect a short-run negative impact prior to any such adjustments, which is precisely what we document here. Furthermore, while the prior literature is focused on studying the effects

[5]Several studies also document a positive relation between immigration and productivity and/or innovation outcomes in the context of geographies and local labor markets. These studies include Saxenian (2002); Hunt and Gauthier-Loiselle (2010); Kahn and MacGarvie (2016); Miguelez and Temgoua (2020); Bahar et al. (2019, 2020). Kerr et al. (2016) provide an excellent summary of this literature.

of the H-1B visa policy on firm outcomes in equilibrium, we complement the prior literature by studying the effects of how a policy shock to the H-1B visa program affects market valuation of U.S. firms in the immediate term.

Our paper first describes the data and the empirical strategy, after which we detail the results. Finally, in the last section, we offer some concluding remarks.[6]

2 Data and Empirical Strategy

We estimate the impact of President Trump's EO restricting worker's visas on the value of Fortune 500 firms by identifying changes in their cumulative average abnormal returns (CAARs), using stock market data.

Our data come from two primary sources: (1) Thomson Reuters Datastream and (2) Department of Labor (DOL) Labor Condition Application (LCA) requests.[7] The former provides information on daily stock returns for all firms in our sample as well as the daily returns for the Standard and Poor's 500 Index (S&P500), which we use as a market index proxy, between January 2019 and July 2020. The latter is a proxy for firm demand for H-1B visas between 2015 and 2019.[8] We also obtain market capitalization data from S&P Capital IQ and employment data from Compustat. Our final sample consists of 471 firms, the universe of all Fortune 500 companies in any year between 2010 to 2015 that are publicly traded (and hence for which stock market data is available).[9]

We employ the event study methodology, a workhorse method introduced by (Fama et al., 1969) and used extensively in the economics and finance literatures (Binder, 1985; Schoar and Zuo, 2016). We measure the impact of the June 2020 EO on the stock return of the companies in our sample in the following way.

[6] Our paper is accompanied by an Online Appendix where we report additional information as well as results for several robustness tests.

[7] We use predated LCA applications following the literature to identify those visas that are subject to the H-1B cap. In other words, we infer whether a given LCA application is for a cap-subject H-1B visa by looking at the date of the LCA application. We assume that any LCA filed between January and April with a work start date 5-6 months in the future represents demand for a cap-subject H-1B visa for the following fiscal year.

[8] The H-1B application process is a two-stage process. Before a firm can file a petition with US Customs and Immigration Services (USCIS), they must file an LCA with the DOL. There is no limit â beyond cost â on the number of LCAs that a firm can file, so demand is measured independent of whether an H-1B is ultimately issued or not.

[9] In Online Appendix Section A we provide the full list of the 471 companies in our final sample with their corresponding one-digit NAICS industry code and their market capitalization at close of June 19, 2020, the business day before the EO was announced.

First, we estimate a market model to measure the expected return of each one of the companies during the event window. Following (**?**) we first estimate for each company i:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t} \tag{1}$$

where $R_{i,t}$ is the daily stock return of company i (for each trading day t) and $R_{m,t}$ represents the market's daily return, which in our baseline estimations is proxied by the Standard and Poor's 500 Index.[10]

For each company in our sample, we estimate the market model for all trading days of 2019.[11]. That model then forms our expectations as to how the company stock should behave with respect to the market during the event we explore in 2020. With this, we then estimate the daily abnormal return (AR) as:

$$AR_{i,t} = R_{i,t} - \hat{\alpha}_i - \hat{\beta}_i R_{m,t} \tag{2}$$

where $AR_{i,t}$ is the estimated abnormal return computed as a residual using the estimators for each firm i of α and β from specification (1). Following the literature, we average the abnormal returns over different windows around the event dates, which correspond to the cumulative average abnormal returns (CAARs) for each company. Following (Schoar and Zuo, 2016), our baseline estimation is based on averaging the cumulative abnormal results for the 3-day window [-1, +1] and the 5-day window [-1,+3] surrounding the events. In other words, we compute CAARs as:

$$CAAR_i = \frac{1}{T-t} \sum_{t=-1}^{t=T} AR_{i,t} \tag{3}$$

where T is 1 or 3 in our baseline estimations.

We chose asymmetric windows to avoid confounding our results with unexpected market volatility due to the ongoing global COVID-19 pandemic and not the immigration announcements themselves. However, it is important to note that our results are robust to using symmetric windows (as is typical in some

[10] Our results are robust to using Barclay's Fortune 500 index as a market proxy, too.

[11] There is no widely agreed upon estimation period in the literature. We follow (Schoar and Zuo, 2016) and use all of 2019, the year before the event we analyze, as the estimation period, but our results are also robust to including the first few months of 2020 as part of our estimation period.

of the literature) and, as we show below, robust for longer windows including more post-event days.

We proceed to test whether the firms in our sample experienced a significant deviation from what we would expect from those stocks given the market behavior and the stocks' relationship to the market. We do this, first, by simply establishing whether we can or cannot reject the hypothesis that the sample mean of CAARs –which we refer to as μ– is statistically different from zero. Second, we also compare between-CAARs averages for sub-samples of firms, based on their dependence on the immigrant workforce (similar to the t-tests performed by Schoar and Zuo (2016)).

3 Results

We first examine the CAARs sample mean μ for the days that followed the announcement affecting non-immigrant visas. Table 1 summarizes this exercise. Columns 1 and 2 report the CAARs sample mean (μ) using a 3-day window (from $t = -1$ to $t = 1$) while columns 3 and 4 use a 5-day window (from $t = -1$ to $t = 3$). Columns 1 and 3 present the simple average while Columns 2 and 4 present the within-sector average, where sector is defined as the firms' reported 1-digit NAICS industry code. We do this to make sure our results are not biased by the behavior of a particular sector. When including sector fixed effects, our sample drops to 468 because we lack sector data for three firms.

[Table 1 about here.]

The CAARs response to the EO restricting non-immigrant work visas is negative, statistically significant, and remains strikingly similar at 0.45% for both windows. In other words, in the days following the June 22, 2020 announcement banning work visas, Fortune 500 firms lost on average nearly 0.5% of their value. The results are also robust –and strikingly similar– when controlling for industry fixed effects.

According to market capitalization figures for the 471 companies in our sample, the total value of the companies at the end of June 19, 2020 –the business day before the policy announcement was made– was about 22.68 trillion dollars. Thus, the 0.45% negative effect we estimate represents a loss of about 100.14 billion dollars for the economy as a whole.

We also find that this result remains consistent even when we expand the estimation to longer windows that incorporate more post-event days, as shown

in Figure 4, which plots μ , with $t = -1$ as the start day of the window but with a varying end day, from $t = 1$ to $t = 10$. The figure shows the negative effect of the EO, which specifically affected the ability of firms to hire foreign workers, remained steady for 10 days after the announcement.

[Figure 1 about here.]

Heterogeneous Effects

In this section, we examine which firms and sectors were especially negatively impacted by the EO.

First, we explore whether the effect we find is more or less prevalent across the different sectors of the economy. Thus we repeat the exercise of estimating μ this time by sectors of the economy according to the 1-digit NAICS code reported by every firm. In particular we look at the four sectors where most of the firms are concentrated: Mining, Utilities and Construction (MUC), Manufacturing (MNFTR), Commerce (COM), and Financial, Information Technology and Real Estate (FIRE). Results are presented in Table 2.

[Table 2 about here.]

The results show negative values for μ across all sectors, but the negative estimates are especially large for the Financial, Information Technology and Real Estate (FIRE) sector, followed by the Mining, Utilities and Construction (MUC) sector. However, all in all, our results suggest that the EO negatively impacted the valuation of all firms in our sample, regardless of industry.

Another component we exploit is the reliance on the immigrant workforce of these firms. We would expect that firms with non-decreasing reliance on hiring foreign workers would be most impacted by an unexpected restriction on their ability to hire said workers. We therefore look for differential effects for sub-samples of firms based on their known reliance on foreign workers.

To explore this, we divide the sample in two sub-samples based on the growth of LCA applications over the past three years. For our baseline estimation we use the Compound Average Growth Rate as our baseline growth measure as follows:

$$CAGR_{i,t\to T} = \left(\frac{\frac{LCA_{i,T}}{emp_{i,T}}}{\frac{LCA_{i,t}}{emp_{i,t}}} \right)^{\frac{1}{T-t}} - 1 \tag{4}$$

In our baseline results T is 2019 and t is 2016, LCA is the predated Labor Condition Applications for firm i in each year, and emp is the total number of employees of firm i in each year.[12]

Based on the distribution of CAGR for the 471 firms we create two sub-samples based on their 3-year growth rate during 2016 to 2019: negative growth and zero or positive growth, which corresponds to dividing the sample above and below the median of the growth distribution.[13]

Essentially, we split the sample by whether firms had negative vs steady/positive growth in LCA applications. We name these two sub-samples L and H for low and high values of the distribution of growth, respectively.

We then proceed, in similar fashion as Schoar and Zuo (2016), to comparing μ^L and μ^H (e.g., that is, the sub-sample means of the CAARs) by computing $\Delta = \mu^H - \mu^L$. Table 3 presents the results for these estimations using the window [-1,1] and [-1,3] to compute CAARs in Columns 1 and 2 and Columns 3 and 4, respectively. As with Table 1, the even columns present results using within-sector variation, only.[14]

[Table 3 about here.]

Table 3 shows that the 295 firms in our sample with zero or positive LCA growth during 2016-2019 (as a share of their employees) experienced a 0.2 to 0.3 percent larger drop in their valuation following the June EO than the 176 firms that had reduced their dependence on LCAs. Considering that the drop in the valuation of firms with negative LCA growth was around 0.3 percent (as

[12]Our results are robust to computing growth rate in different manners, including using nominal value of LCAs (e.g., not normalized by the number of employees) as shown in Online Appendix C.

[13]As can be seen in Figure B in Online Appendix B, the distribution of CAGR for the firms in our sample behaves similarly to a normal distribution with two particular values standing out: -1 (e.g., 100% negative growth rate) for firms that went from having any positive value of LCA in 2016 to none in 2019, and 0 for firms that experienced no growth in LCAs (as a share of employees) between those two years, which is a significant share of all firms. Online Appendix B also shows that our main results are unchanged if we use other moments of the growth distribution to define the sub-samples.

[14] These results were obtained by estimating the following specification:

$$CAAR_i^{[-1,T]} = \mu + \Delta H_i + \eta_s + u_i \tag{5}$$

where H_i is a binary variable indicating whether firm i belongs to sub-sample H. Accordingly, $\mu^L = \mu$ and $\mu^H = \mu + \Delta$. T is a post-event day marking the upper limit of the window used to compute the CAARs that serve as dependent variable. η_s represent sector (the first digit of the NAICS code) fixed effects.

shown by μ^L in Table 3), this implies that firms in the zero or positive LCA growth sub-sample were hit almost twice as hard by the announcement.

In fact, as Figure 4 indicates, we find that the notable difference in the sub-samples CAAR means between the two groups, μ^H and μ^L, was sustained for at least 10 days after the policy announcement was made, and the difference Δ remains statistically different from zero for longer windows as well. Thus, the negative shock in these companies' valuation was not reversed for at least two weeks after the announcement.[15]

[Figure 2 about here.]

4 Conclusions

In this paper we employ the event study methodology to estimate how an Executive Order restricting the entry of temporary foreign workers to the U.S. negatively affected the valuation of 471 publicly traded Fortune 500 firms. To the best of our knowledge, this paper provides the first set of results on whether, and to what extent, markets value shocks to employment based immigration policy in the very short term. We do not view the results reported in this paper as reflecting equilibrium conditions. Over the medium to long term, it is conceivable that firms respond to this shock by engaging in the process of allocating resources across geographies (Glennon, 2020). While there may be such long-run adjustments that firms can make when access to skilled labor supply is abruptly constrained, we document that there is a significant short-run negative impact. In this particular instance, the June 22 2020 immigration ban plausibly eroded valuation to the tune of 100 billion dollars for the firms in our sample. These results not only contribute to the broader academic debate surrounding whether or not, and to what extent, skilled work visas create value for firms, but they also inform the current ongoing policy discussions surrounding H-1B visas in particular.[16]

[15] Online Appendix Section D extends this analysis and replicates the estimation for all trading days between January 1st and June 15th of 2020. We find no evidence of our result being driven by idiosyncratic factors given that the estimates of Δ are statistically insignificant in nearly 93% of the trading days in period. The few exceptions, we argue, can be explained by the economic context of the particular days.

[16] In July 2020, the US Chamber of Commerce sued the Trump Administration, challenging the June 22 EO. In an Amicus Brief submitted on August 10, 2020, companies such as Facebook, Netflix, Adobe, Reddit, GitHub, Paypal, and Amazon argued that the "indiscriminate

References

Bahar, Dany, Prithwiraj Choudhury, and Hillel Rapoport. "Migrant inventors and the technological advantage of nations." *Research Policy* 103947.

Bahar, Dany, Andreas Hauptmann, Cem Ozguzel, and Hillel Rapoport. "Migration and Post-Conflict Reconstruction : The Effect of Returning Refugees on Export Performance in the Former Yugoslavia." *IZA Discussion Paper Series* , 12412.

Beerli, A., J. Ruffner, M. Siegenthaler, and G. Peri. "Immigrants and firmsâ outcomes: Evidence from France." *NBER Working Paper* .

Binder, John J. "Measuring the effects of regulation with stock price data." *The RAND Journal of Economics* 167–183.

Chishti, Muzaffar, Sarah Pierce, and Kira Olsen-Medina. "Impending USCIS Furloughs Will Contribute to a Historic Drop in U.S. Immigration Levels." Technical report, Migration Policy Institute, 2020.

Choudhury, Prithwiraj, and Do Yoon Kim. "The ethnic migrant inventor effect: Codification and recombination of knowledge across borders." *Strategic Management Journal* 40, 2: (2019) 203–229.

Doran, Kirk, Alexander Gelber, and Adam Isen. "The effects of high-skilled immigration policy on firms: Evidence from H-1B visa lotteries." Technical report, Working Paper, 2020.

Fama, Eugene F, Lawrence Fisher, Michael C Jensen, and Richard Roll. "The adjustment of stock prices to new information." *International economic review* 10, 1: (1969) 1–21.

Foley, C Fritz, and William R Kerr. "Ethnic innovation and US multinational firm activity." *Management Science* 59, 7: (2013) 1529–1544.

Glennon, Britta. "How do restrictions on high-skilled immigration affect offshoring? Evidence from the H-1B program." *NBER Working Paper* .

suspension of these crucial non-immigrant visas programs does not further the interests of the United States" (Source: https://www.theverge.com/2020/8/10/21362198/trump-immigrant-worker-ban-tech-companies-economy). On October 1, 2020, a federal judge ruled that President Trump had overstepped his authority in banning the visas, a ruling that was quickly followed with further tightening of H-1B visa rules on October 6th.

Hunt, Jennifer, and Marjolaine Gauthier-Loiselle. "How much does immigration boost innovation?" *American Economic Journal: Macroeconomics* 2, 2: (2010) 31–56.

Kahn, Shulamit, and Megan J MacGarvie. "How important is US location for research in science?" *Review of Economics and Statistics* 98, 2: (2016) 397–414.

Kerr, Sari Pekkala, William Kerr, Çağlar Özden, and Christopher Parsons. "Global talent flows." *Journal of Economic Perspectives* 30, 4: (2016) 83–106.

Kerr, Sari Pekkala, William R Kerr, and William F Lincoln. "Skilled immigration and the employment structures of US firms." *Journal of Labor Economics* 33, S1: (2015) S147–S186.

Kerr, William R, and William F Lincoln. "The supply side of innovation: H-1B visa reforms and US ethnic invention." *Journal of Labor Economics* 28, 3: (2010) 473–508.

Leiden, Warren R, and David L Neal. "Highlights of the US Immigration Act of 1990.", 1990.

Mayda, AM, F Ortega, G Peri, KY Shih, and C Sparber. "Coping with H-1B Shortages: Firm Performance and Mitigation Strategies." *NBER Working Paper* .

Miguelez, Ernest, and Claudia Noumedem Temgoua. "Inventor migration and knowledge flows: A two-way communication channel?" *Research Policy* 49, 9: (2020) 103,914.

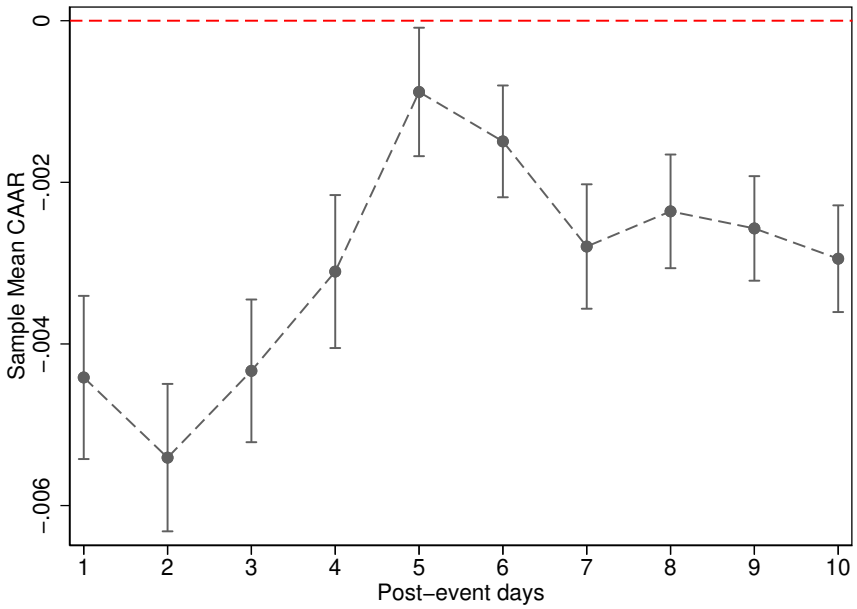
Mitaritonna, Cristina, Gianluca Orefice, and Giovanni Peri. "Immigrants and firms' outcomes: Evidence from France." *European Economic Review* 96: (2017) 62 – 82.

Olney, William. "Immigration and firm expansion." *Journal of Regional Science* .

Saxenian, AnnaLee. "Silicon Valleyâs new immigrant high-growth entrepreneurs." *Economic development quarterly* 16, 1: (2002) 20–31.

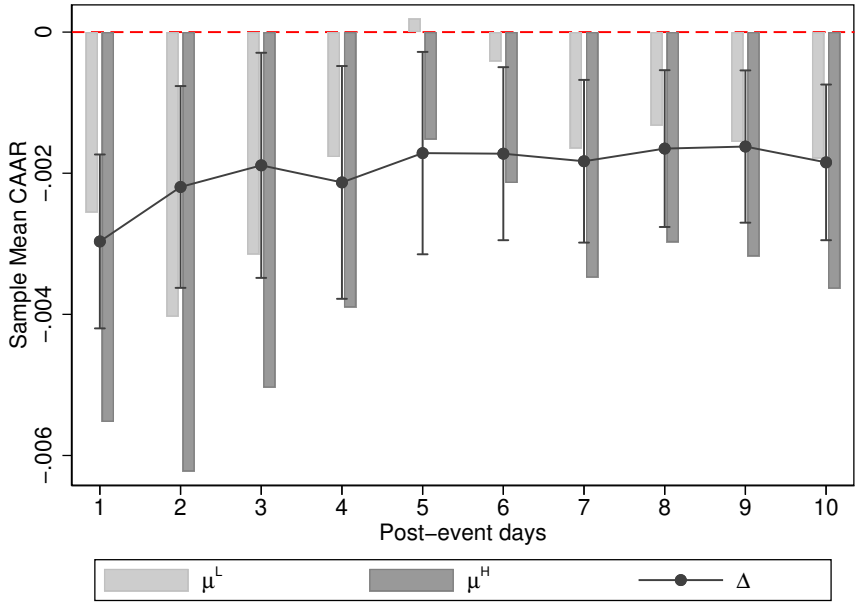
Schoar, Antoinette, and Luo Zuo. "Does the Market Value CEO Styles?" *American Economic Review* 106, 5: (2016) 262–66.

Figure 1: Sample Mean CAARs (μ)



This figure plots the sample mean CAARs (μ) for the June 2020 event varying the end-day of the window used to compute such CAARs in the horizontal axis: 1 represents the sample mean CAAR for window [-1,1], 2 for [-1,2], 3 for [-1,3] and so on until [-1,10]. Whiskers represent 95% confidence intervals using robust standard errors.

Figure 2: Event Study for Sub-Samples of LCA Growth Rates



This figure plots using bars the sub-samples mean CAARs (μ^L and μ^H) varying the end-day of the window used to compute such CAARs in the horizontal axis: 1 represents the sample mean CAAR for window [-1,1], 2 for [-1,2], 3 for [-1,3] and so on until [-1,10]. The markers present the difference $\Delta = \mu^H - \mu^L$ with whiskers representing 95% confidence intervals using robust standard errors.

Table 1: Event Study Immigration Policy Announcement

Dependent Variable: CAARs				
	(1)	(2)	(3)	(4)
	[-1,1]	[-1,1]	[-1,3]	[-1,3]
μ	-0.0044	-0.0045	-0.0043	-0.0044
	(0.001)***	(0.001)***	(0.000)***	(0.000)***
N	471	468	471	468
R sq	0.000	0.033	0.000	0.030
Sector FE	N	Y	N	Y

The table reports CAARs sample means (μ) for days surrounding the announcement restricting non-immigrant work visas. Columns 1 and 2 are based on CAARs computed for the window [-1,1] and Columns 3 and 4 for the window [-1,3]. Columns 1 and 3 report the sample mean, while Columns 2 and 4 report the within-sector sample mean, where sector is defined as the firms' reported 1-digit NAICS industry code. Robust standard errors are presented in parentheses.

$^{*}p < 0.10,^{**}\ p < 0.05,^{***}\ p < 0.01$

Table 2: Event Study by Economic Sector

Dependent Variable: CAARs				
	(1)	(2)	(3)	(4)
	MUC	MNFTR	COM	FIRE
μ	-0.0069	-0.0035	-0.0022	-0.0055
	(0.001)***	(0.001)***	(0.001)*	(0.001)***
N	58	164	95	127
Adj R2	0.00	0.00	0.00	0.00

The table reports CAARs sample means (μ) for days surrounding June 2020 announcement restricting non-immigrant work visas. Each column presents result for a different sector. MUC: Mining, Utilities and Construction; MNFTR: Manufacturing; COM: Commerce; FIRE: Financial, Information Technology and Real Estate. All columns are based on CAARs computed for the window of days [-1,1]. Robust standard errors are presented in parenthesis.

$^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

Table 3: Event Study for Sub-Samples of LCA Growth Rates

Dependent Variable: CAARs				
	(1)	(2)	(3)	(4)
	[-1,1]	[-1,1]	[-1,3]	[-1,3]
Δ	-0.0030	-0.0024	-0.0019	-0.0017
	(0.001)***	(0.001)*	(0.001)*	(0.001)*
N^L	176	176	176	176
μ^L	-0.003	-0.003	-0.003	-0.003
N^H	295	295	295	295
μ^H	-0.006	-0.005	-0.005	-0.005
Sector FE	N	Y	N	Y

The table reports Δ, the difference between sub-sample means of CAARs for firms with negative (L) and zero or positive (H) growth rate of LCA applications. The sub-sample means (μ) and number of firms (N) belonging to each sample L and H are also reported in each column. Columns 1 and 2 are based on CAARs computed for the window of days [-1,1] and Columns 3 and 4 for the window [-1,3]. Results in Columns 1 and 3 are based on simple sub-sample means, while in Columns 2 and 4 are based on within-sector sub-sample means, whereas sector is defined as the firms' reported 1-digit NAICS industry code. Robust standard errors are presented in parenthesis.

$^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

Online Appendix for

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A Sample Details

Table A1 lists the companies in our sample alongside its corresponding sector (NAICS 1-digit) and its market capitalization figure for June 19, 2020, the business day before the EO was announced.

Table A1: List of Companies

#	Company	Sector	Market Cap (mil. USD)
1	3M	3	90967.306
2	A-MARK PRECIOUS METALS	4	127.480
3	ABBOTT LABORATORIES	3	160398.894
4	ABBVIE	3	170436.116
5	ABM INDS.	5	2552.646
6	ACTIVISION BLIZZARD	5	59003.776
7	ADOBE (NAS)	5	206215.582
8	ADV.AUTO PARTS	4	9973.499
9	ADVANCED MICRO DEVICES	3	63513.655
10	AECOM	5	6147.296
11	AES	2	8869.866
12	AFLAC	5	26260.790
13	AGCO	3	4060.828
14	AGILENT TECHS.	3	27397.818
15	AIR PRDS.& CHEMS.	3	52013.478
16	ALASKA AIR GROUP	4	4448.623
17	ALCOA	3	2134.348
18	ALLEGHANY	5	6919.017
19	ALLEGHENY TECHS.	3	1254.901
20	ALLIANCE DATA SYSTEMS	5	2257.565
21	ALLSTATE ORD SHS	5	31012.682
22	ALLY FINANCIAL	5	7168.319
23	ALPHABET A	5	974868.089
24	ALTRIA GROUP	3	75616.996

Continued on next page

Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
25	AMAZON.COM	4	1334230.873
26	AMER.AXLE & MNFG.	3	834.576
27	AMER.ELEC.PWR.	2	39502.932
28	AMEREN	2	17232.994
29	AMERICAN AIRLINES GROUP	4	6766.312
30	AMERICAN EXPRESS	5	81253.823
31	AMERICAN FINL.GP.OHIO	5	5689.672
32	AMERICAN INTL.GP.	5	27397.656
33	AMERICAN TOWER	5	117742.190
34	AMERIPRISE FINL.	5	18148.731
35	AMERISOURCEBERGEN	4	20777.593
36	AMGEN	3	140414.654
37	AMPHENOL 'A'	3	28710.631
38	ANDERSONS	4	459.394
39	ANTHEM	5	67171.292
40	APACHE	2	5276.416
41	APPLE	3	1515803.636
42	APPLIED MATS.	3	55859.413
43	ARAMARK	7	5979.418
44	ARCHER DANIELS MIDLAND	3	22353.167
45	ARROW ELECTRONICS	4	5210.957
46	ARTHUR J GALLAGHER	5	17964.694
47	ASBURY AUTOMOTIVE GP.	4	1446.350
48	ASCENA RETAIL GROUP	4	20.307
49	ASHLAND GLOBAL HDG.	3	4156.353
50	ASSURANT	5	6339.841
51	AT&T	5	215958.750
52	ATMOS ENERGY	2	12196.904
53	AUTOLIV	n.a	5509.618
54	AUTOMATIC DATA PROC.	5	64036.382
55	AUTONATION	4	3315.919
56	AUTOZONE	4	26410.111
57	AVERY DENNISON	3	9544.101
58	AVIS BUDGET GROUP	5	1779.238
59	AVNET	4	2658.754
60	BAKER HUGHES A	2	10146.489
61	BALL	3	23041.805
62	BANK OF AMERICA	5	219059.176
63	BANK OF NEW YORK MELLON	5	34735.922
64	BAXTER INTL.	3	42991.573
65	BECTON DICKINSON	3	70282.471
66	BED BATH & BEYOND	4	1221.177
67	BERKSHIRE HATHAWAY 'A'	9	438125.495
68	BERRY GLOBAL GROUP	3	5865.775
69	BEST BUY	4	20974.694
70	BIG LOTS	4	1309.533
71	BIOGEN	3	44223.809
72	BLACKSTONE GROUP A	5	40065.410
73	BOEING	3	105540.126
74	BOOKING HOLDINGS	5	66590.908
75	BOOZ ALLEN HAMILTN.HLDG.	5	11006.081
76	BORGWARNER	3	7096.920

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Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
77	BOSTON SCIENTIFIC	3	52137.095
78	BRISTOL MYERS SQUIBB	3	127638.329
79	BRUNSWICK	3	4754.037
80	BUILDERS FIRSTSOURCE	3	2516.462
81	BURLINGTON STORES	4	13518.482
82	CAESARS ENTERTAINMENT	7	8399.926
83	CALUMET SPY.PRDS.PTNS.	3	211.263
84	CAMPBELL SOUP	3	14848.360
85	CAPITAL ONE FINL.	5	30992.957
86	CARDINAL HEALTH	4	15711.789
87	CARMAX	4	14952.333
88	CASEY'S GENERAL STORES	4	5728.759
89	CATERPILLAR	3	68986.363
90	CBRE GROUP CLASS A	5	15305.345
91	CDW	4	16644.101
92	CELANESE	3	10252.810
93	CENTENE	5	37191.691
94	CENTERPOINT EN.	2	9690.078
95	CENTURYLINK	5	11139.647
96	CH ROBINSON WWD.	4	10465.926
97	CHARLES SCHWAB	5	47209.432
98	CHARTER COMMS.CL.A	5	110799.569
99	CHEMOURS	3	2599.579
100	CHEVRON	3	169204.275
101	CHUBB	5	57751.155
102	CIGNA	5	70622.960
103	CINCINNATI FINL.	5	10157.833
104	CINTAS	8	28110.203
105	CISCO SYSTEMS	3	191354.464
106	CIT GROUP	5	2237.843
107	CITIGROUP	5	110169.280
108	CITIZENS FINANCIAL GROUP	5	10814.793
109	CLEVELAND CLIFFS	2	2232.216
110	CLOROX	3	27408.236
111	CMS ENERGY	2	16580.096
112	CNX RESOURCES	2	1835.045
113	COCA COLA	3	197650.900
114	COGNIZANT TECH.SLTN.'A'	5	29277.816
115	COLGATE-PALM.	3	62834.927
116	COMCAST A	5	178458.563
117	COMMERCIAL MTLS.	3	2416.956
118	COMMUNITY HEALTH SYSTEMS	6	360.872
119	CONAGRA BRANDS	3	16341.410
120	CONDUENT	5	527.896
121	CONOCOPHILLIPS	2	46864.980
122	CONSOLIDATED EDISON	2	23868.250
123	CONSTELLATION BRANDS 'A'	3	34725.404
124	CORE MARK HOLDING	4	1116.331
125	CORELOGIC	n.a	3945.952
126	CORNING	3	20317.311
127	COSTCO WHOLESALE	4	132412.961
128	COTY CL.A	3	3601.810

Continued on next page

Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
129	CROWN HDG.	3	8710.211
130	CSX	4	52044.026
131	CUMMINS	3	25694.893
132	CVR ENERGY	3	2242.838
133	CVS HEALTH	4	84294.288
134	D R HORTON	2	20379.930
135	DANAHER	3	122279.176
136	DARDEN RESTAURANTS	7	9126.615
137	DAVITA	6	9689.648
138	DCP MIDSTREAM UNIT	2	2693.706
139	DEERE	3	48452.416
140	DELEK US HOLDINGS	3	1396.834
141	DELL TECHNOLOGIES C	3	36240.741
142	DELTA AIR LINES	4	18744.661
143	DEVON ENERGY	2	4952.697
144	DICK'S SPORTING GOODS	4	3524.223
145	DILLARDS 'A'	4	611.879
146	DISCOVER FINANCIAL SVS.	5	16457.541
147	DISCOVERY SERIES A	5	14271.622
148	DISH NETWORK 'A'	5	18581.514
149	DOLLAR GENERAL	4	47520.047
150	DOLLAR TREE	4	21066.237
151	DOMINION ENERGY	2	68583.592
152	DOMTAR	3	1253.956
153	DOVER	3	13660.571
154	DTE ENERGY	2	19985.409
155	DUKE ENERGY	2	60338.742
156	DUPONT DE NEMOURS	3	38597.736
157	DXC TECHNOLOGY	5	3915.390
158	EASTMAN CHEMICAL	3	9439.762
159	EATON	n.a	35736.000
160	EBAY	5	33932.354
161	ECOLAB	3	56834.363
162	EDISON INTL.	2	21036.222
163	EL PASO ELEC.	4	2717.239
164	ELI LILLY	3	144977.685
165	EMCOR GROUP	2	3401.016
166	EMERSON ELECTRIC	3	37031.519
167	ENERGY TRANSFER (NYS) UNITS	4	21473.637
168	ENTERGY	2	18919.306
169	ENTERPRISE PRDS.PTNS.LP.	4	41748.785
170	EOG RES.	2	30441.003
171	ESTEE LAUDER COS.'A'	3	68507.739
172	EVERSOURCE ENERGY	2	28393.530
173	EXELON	2	36569.527
174	EXPEDIA GROUP	5	11569.052
175	EXPEDITOR INTL.OF WASH.	4	12240.646
176	EXXON MOBIL	3	194413.153
177	FEDEX	4	35955.807
178	FIDELITY NAT.FINANCIAL	5	9439.516
179	FIRST AMER.FINL.	5	5617.851
180	FIRSTENERGY	2	21117.559

Continued on next page

Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
181	FISERV	5	66981.902
182	FLUOR	2	1890.953
183	FOOT LOCKER	4	2927.931
184	FORD MOTOR	3	24776.959
185	FORTIVE	3	22862.678
186	FRANKLIN RESOURCES	5	10871.973
187	FREEPORT-MCMORAN	2	15245.693
188	FRONTIER COMMUNICATIONS	5	12.158
189	GAMESTOP 'A'	4	316.023
190	GAP	4	3981.198
191	GENERAL DYNAMICS	3	45111.923
192	GENERAL ELECTRIC	9	62541.708
193	GENERAL MILLS	3	37326.035
194	GENERAL MOTORS	3	38052.323
195	GENESIS HEALTHCARE 'A'	6	84.815
196	GENUINE PARTS	4	12634.316
197	GENWORTH FINANCIAL CL.A	5	1353.738
198	GILEAD SCIENCES	3	97176.307
199	GLOBAL PARTNERS UNITS	4	340.054
200	GOLDMAN SACHS GP.	5	72301.583
201	GOODYEAR TIRE & RUB.	3	1989.799
202	GRAHAM HOLDINGS 'B'	6	1706.736
203	GROUP 1 AUTOMOTIVE	4	1130.763
204	HALLIBURTON	2	11439.701
205	HANESBRANDS	3	3950.201
206	HARLEY-DAVIDSON	3	3751.848
207	HARTFORD FINL.SVS.GP.	5	14315.838
208	HCA HEALTHCARE	6	32927.971
209	HD SUPPLY HOLDINGS	4	5640.617
210	HENRY SCHEIN	4	8625.321
211	HERSHEY	3	26926.846
212	HERTZ GLOBAL HOLDINGS	5	246.154
213	HESS	2	15634.861
214	HEWLETT PACKARD ENTER.	3	12616.315
215	HILTON WORLDWIDE HDG.	7	21119.007
216	HNTGTN.INGALLS INDS.	3	7231.130
217	HOLLYFRONTIER	3	5186.204
218	HOME DEPOT	4	265277.715
219	HONEYWELL INTL.	3	102027.613
220	HORMEL FOODS	3	26166.111
221	HOST HOTELS & RESORTS	5	8226.871
222	HUMANA	6	50338.783
223	HUNTSMAN	3	4040.182
224	ICAHN ENTERPRISES	9	10415.424
225	ILLINOIS TOOL WORKS	3	53986.469
226	INGREDION	3	5746.285
227	INSIGHT ENTS.	4	1705.564
228	INTEL	3	252431.080
229	INTERNATIONAL BUS.MCHS.	5	108740.128
230	INTERNATIONAL PAPER	3	13701.419
231	INTERPUBLIC GROUP	5	6646.814
232	IQVIA HOLDINGS	5	25986.350

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Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
233	ITT	3	4758.582
234	J M SMUCKER	3	12423.864
235	JABIL	3	5050.541
236	JACOBS ENGR.	2	11134.186
237	JEFFERIES FINANCIAL GROUP	5	4084.129
238	JETBLUE AIRWAYS	4	3074.665
239	JOHNSON & JOHNSON	3	378933.732
240	JOHNSON CONTROLS INTL.	3	25529.356
241	JONES LANG LASALLE	5	5389.715
242	JP MORGAN CHASE & CO.	5	297983.048
243	KBR	2	3467.776
244	KELLOGG	3	23226.174
245	KELLY SERVICES 'A'	5	593.984
246	KEURIG DR PEPPER	3	40399.317
247	KEYCORP	5	13021.665
248	KIMBERLY-CLARK	3	49025.163
249	KINDER MORGAN	4	35098.280
250	KKR AND	5	17764.819
251	KOHL'S	4	3509.644
252	KROGER	4	25082.720
253	L3HARRIS TECHNOLOGIES	3	39340.211
254	LABORATORY CORP.OF AM. HDG.	6	15780.420
255	LAM RESEARCH	3	45762.393
256	LEAR	3	6658.268
257	LEGG MASON	5	4416.299
258	LEGGETT&PLATT	3	4486.829
259	LEIDOS HOLDINGS	5	13735.632
260	LENNAR 'A'	2	18224.049
261	LIBERTY GLOBAL CL.A	5	13860.496
262	LINCOLN NATIONAL	5	7651.688
263	LITHIA MOTORS 'A'	4	3241.714
264	LIVE NATION ENTM.	7	9835.382
265	LKQ	4	7881.890
266	LOCKHEED MARTIN	3	104378.024
267	LOEWS	5	9774.080
268	LOWE'S COMPANIES	4	101042.021
269	M&T BANK	5	14244.680
270	MACY'S	4	2130.532
271	MAGELLAN HEALTH	5	1746.334
272	MANITOWOC	3	386.150
273	MANPOWERGROUP	5	4011.259
274	MARATHON OIL	2	5026.387
275	MARATHON PETROLEUM	3	24833.464
276	MARKEL	5	12821.506
277	MARRIOTT INTL.'A'	7	29079.272
278	MARSH & MCLENNAN	5	52423.787
279	MASCO	3	12789.498
280	MASTEC	2	3221.662
281	MASTERCARD	5	297609.012
282	MATTEL	3	3416.948
283	MCDONALDS	7	138717.841
284	MCKESSON	4	25403.514

Continued on next page

Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
285	MDU RESOURCES GROUP	2	4247.062
286	MEDTRONIC	3	125961.378
287	MERCK & COMPANY	3	196627.483
288	MERITOR	3	1437.324
289	METLIFE	5	33871.211
290	MGM RESORTS INTL.	7	8981.494
291	MICHAELS COMPANIES	4	1007.805
292	MICRON TECHNOLOGY	3	56532.415
293	MICROSOFT	5	1479908.364
294	MOHAWK INDUSTRIES	3	6625.137
295	MOLINA HEALTHCARE	5	10641.200
296	MOLSON COORS BEVERAGE COMPANY B	3	8290.381
297	MONDELEZ INTERNATIONAL CL.A	3	75027.511
298	MORGAN STANLEY	5	73945.554
299	MOSAIC	3	0.000
300	MOTOROLA SOLUTIONS	3	23618.952
301	MRC GLOBAL	4	477.212
302	MURPHY OIL	2	2322.023
303	MYLAN	3	8353.867
304	NATIONAL OILWELL VARCO	3	4557.738
305	NAVISTAR INTL.	3	2722.441
306	NCR	5	2277.396
307	NETAPP	3	9777.663
308	NEWELL BRANDS (XSC)	3	6730.467
309	NEWMONT	2	45683.116
310	NEWS 'A'	5	6985.376
311	NEXTERA ENERGY	2	118549.697
312	NGL ENERGY PARTNERS	4	685.066
313	NIKE 'B'	3	148941.227
314	NISOURCE	2	8792.904
315	NOBLE ENERGY	2	4796.987
316	NORFOLK SOUTHERN	4	43617.059
317	NORTHERN TRUST	5	17197.581
318	NORTHROP GRUMMAN	3	52121.276
319	NORTONLIFELOCK	5	12257.688
320	NRG ENERGY	2	8318.487
321	NUCOR	3	12858.453
322	O I GLASS	3	1360.605
323	O REILLY AUTOMOTIVE	4	31336.582
324	OCCIDENTAL PTL.	2	17739.358
325	OLD REPUBLIC INTL.	5	4925.509
326	OLIN	3	2033.123
327	OMNICOM GROUP	5	11427.706
328	ON SEMICONDUCTOR	3	7950.301
329	ONEOK	2	15478.539
330	ORACLE	5	171554.970
331	OSHKOSH	3	5001.155
332	OWENS & MINOR	4	462.477
333	OWENS CORNING	3	5935.582
334	PACCAR	3	25915.688
335	PACKAGING CORP.OF AM.	3	9369.897
336	PARKER-HANNIFIN	3	23456.094

Continued on next page

Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
337	PATTERSON COMPANIES	4	1828.064
338	PAYPAL HOLDINGS	5	192985.082
339	PEABODY ENERGY	2	306.778
340	PENNEY JC	4	108.363
341	PENSKE AUTOMOTIVE GP.	4	3074.419
342	PEPSICO	3	182151.057
343	PERFORMANCE FOOD GROUP	4	3465.712
344	PFIZER	3	185642.544
345	PG&E	2	5414.412
346	PHILIP MORRIS INTL.	3	112424.753
347	PHILLIPS 66	3	32619.601
348	PIONEER NTRL.RES.	2	15427.900
349	PITNEY-BOWES	3	450.556
350	PLAINS GP HOLDINGS CL.A	4	1742.911
351	PNC FINL.SVS.GP.	5	45917.707
352	POLARIS INDUSTRIES	3	5758.048
353	PPG INDUSTRIES	3	24469.978
354	PPL	2	19987.851
355	PRINCIPAL FINL.GP.	5	11549.004
356	PROCTER & GAMBLE	3	294403.420
357	PROGRESSIVE OHIO	5	47403.323
358	PROLOGIS REIT	5	67853.528
359	PRUDENTIAL FINL.	5	24920.550
360	PUB.SER.ENTER.GP.	2	24629.010
361	PULTEGROUP	2	9296.709
362	PVH	3	3328.182
363	QUALCOMM	3	99904.854
364	QUANTA SERVICES	2	5328.300
365	QUEST DIAGNOSTICS	6	14479.144
366	QURATE RETAIL SERIES A	4	3859.889
367	R R DONNELLEY & SONS	3	88.451
368	RALPH LAUREN CL.A	3	5187.089
369	RAYMOND JAMES FINL.	5	10093.668
370	REALOGY HOLDINGS	5	846.833
371	REGENERON PHARMS.	3	65392.452
372	REGIONS FINL.NEW	5	11516.155
373	REINSURANCE GROUP OF AM.	5	5692.214
374	RELIANCE STEEL AND ALMN.	4	6093.603
375	REPUBLIC SVS.'A'	5	25428.914
376	RITE AID	4	663.319
377	ROBERT HALF INTL.	5	5764.654
378	ROCKWELL AUTOMATION	3	24222.265
379	ROSS STORES	4	33211.046
380	RYDER SYSTEM	5	2009.188
381	S&P GLOBAL	5	77999.293
382	SALESFORCE.COM	5	168441.950
383	SANMINA	3	1706.556
384	SEALED AIR	3	4928.279
385	SEMPRA EN.	2	34299.543
386	SHERWIN-WILLIAMS	3	48301.574
387	SIMON PROPERTY GROUP	5	20522.287
388	SONIC AUTOMOTIVE 'A'	4	1289.739

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Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
389	SOUTHERN	2	56609.786
390	SOUTHWEST AIRLINES	4	20363.270
391	SPARTANNASH	4	643.326
392	SPECTRUM BRANDS HOLDINGS	3	1944.422
393	SPIRIT AEROSYSTEMS CL.A	3	2866.564
394	STANLEY BLACK & DECKER	3	20640.700
395	STARBUCKS	7	88089.820
396	STATE STREET	5	23017.948
397	STEEL DYNAMICS	3	5714.724
398	STRYKER	3	70237.067
399	SYNCHRONY FINANCIAL	5	13874.735
400	SYNNEX	4	5240.252
401	SYSCO	4	27543.351
402	T-MOBILE US	5	0.000
403	TARGA RESOURCES	4	4804.525
404	TARGET	4	60281.866
405	TEGNA	5	2395.090
406	TELEPHONE & DATA SYS.	5	2285.837
407	TENET HEALTHCARE	6	2151.897
408	TENNECO A	3	636.195
409	TEREX	3	1368.570
410	TESLA	3	185537.939
411	TEXAS INSTRUMENTS	3	114616.036
412	TEXTRON	3	7850.076
413	THERMO FISHER SCIENTIFIC	3	139311.103
414	THOR INDUSTRIES	3	6254.571
415	TIMKEN	3	3313.420
416	TJX	4	63056.250
417	TOLL BROTHERS	2	4003.796
418	TRACTOR SUPPLY	4	14762.497
419	TRAVELCENTERS OF AM.	4	185.425
420	TRAVELERS COS.	5	29470.545
421	TRUIST FINANCIAL	3	53009.405
422	TUTOR PERINI	2	615.348
423	TWENTY FIRST CENTURY FOX A	5	0.000
424	TYSON FOODS 'A'	3	23032.319
425	UGI	2	6702.038
426	ULTA BEAUTY	4	11948.782
427	UNION PACIFIC	4	113897.648
428	UNISYS	5	732.971
429	UNITED AIRLINES HOLDINGS	4	10699.521
430	UNITED NATURAL FOODS	4	901.788
431	UNITED PARCEL SER.'B'	4	92916.765
432	UNITED RENTALS	5	11204.417
433	UNITED STATES STEEL	3	1381.748
434	UNITEDHEALTH GROUP	5	276206.046
435	UNIVAR SOLUTIONS	4	2854.426
436	UNIVERSAL HEALTH SVS.'B'	6	8212.763
437	UNUM GROUP	5	3352.369
438	US BANCORP	5	58549.457
439	US FOODS HOLDING	4	4229.420
440	V F	3	24655.215

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Table A1 – continued from previous page

#	Company	Sector	Market Cap (mil. USD)
441	VALERO ENERGY	3	25750.243
442	VERITIV	4	263.072
443	VERIZON COMMUNICATIONS	5	232389.822
444	VIACOMCBS B	5	14705.204
445	VISA 'A'	5	409197.461
446	VISTEON	3	2029.002
447	VISTRA	2	9688.510
448	VOYA FINANCIAL	5	5867.918
449	W R BERKLEY	5	10483.968
450	WALGREENS BOOTS ALLIANCE	4	38711.727
451	WALMART	4	339409.621
452	WALT DISNEY	5	206546.602
453	WASTE MANAGEMENT	5	42949.487
454	WEC ENERGY GROUP	2	27780.319
455	WELLS FARGO & CO	5	113159.932
456	WESCO INTL.	4	1575.683
457	WESTERN DIGITAL	3	13303.729
458	WESTERN UNION	5	8879.653
459	WESTROCK	3	7342.102
460	WEYERHAEUSER	3	16938.875
461	WHIRLPOOL	3	7900.304
462	WILLIAMS-SONOMA	4	6659.279
463	WORLD FUEL SVS.	4	1673.489
464	WW GRAINGER	4	16201.319
465	WYNDHAM DESTINATIONS	5	2568.517
466	XCEL ENERGY	2	33616.184
467	XEROX HOLDINGS	3	3472.972
468	XPO LOGISTICS	5	7215.386
469	YRC WORLDWIDE	4	66.119
470	YUM! BRANDS	7	26565.022
471	ZIMMER BIOMET HDG.	3	26102.563

B Growth Distribution

Figure B presents the distribution of the 2016-2019 LCA growth computed as specified in Equation (4). As can be seen, growth distributes normally, with high frequency for values -1 and 0 (e.g., firms that went from *some to none* LCAs between 2016 and 2019, and firms that experienced no growth whatsoever, respectively).

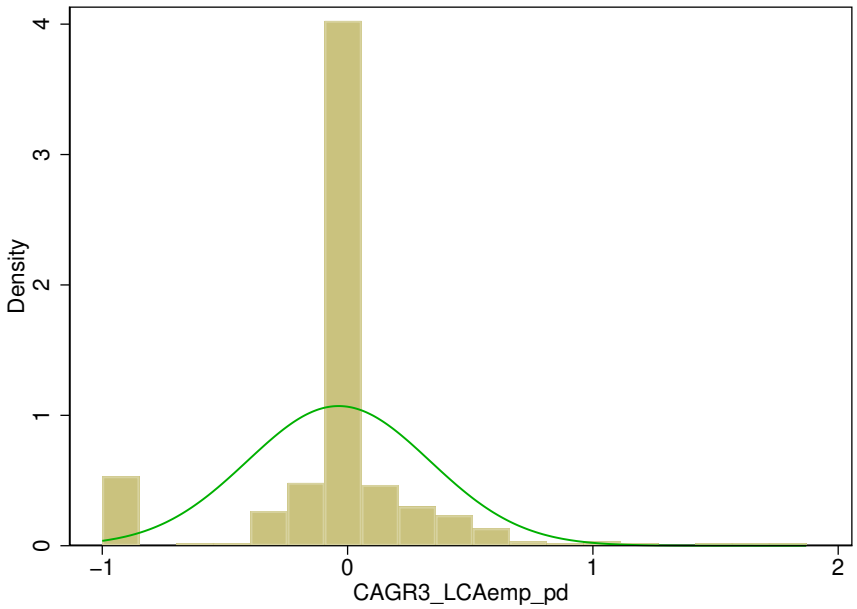
[Figure B1 about here.]

While the median of the distribution corresponds to the value 0 of the distribution, the mean is -.036, and the 25th and 75th percentiles are -0.011 and 0, respectively. Table B1 shows that our results are robust to using the mean as well as the 25th and 75th percentile as the value defining the two sub-samples.[17]

[Table B1 about here.]

[17] In fact, since the median and the 75th percentile both correspond to zero, the results for the 75th percentile are the same as in the baseline specification.

Figure B1: CAARs by Growth Foreign Workers Hiring



This figure plots the distribution of the 2016-2019 LCA growth computed as specified in Equation (4).

Table B1: Event Study for Sub-Samples of LCA Growth Rates

Dependent Variable: CAARs						
	(1)	(2)	(3)	(4)	(5)	(6)
	25	25	mean	mean	75	75
Δ	-0.0032	-0.0026	-0.0032	-0.0027	-0.0030	-0.0024
	(0.001)***	(0.001)**	(0.001)***	(0.001)*	(0.001)***	(0.001)*
N^L	172	172	164	164	176	176
μ^L	-0.002	-0.003	-0.002	-0.003	-0.003	-0.003
N^H	299	299	307	307	295	295
μ^H	-0.006	-0.005	-0.006	-0.005	-0.006	-0.005
Sector FE	N	Y	N	Y	N	Y

The table reports Δ, the difference between sub-sample means of CAARs for firms with lower (L) and higher (H) growth rate of LCA applications based on different moments of the growth distribution: Columns 1 and 2 use the 25th percentile (-0.011), Columns 3 and 4 use the mean (-0.036), and Columns 5 and 6 use the 75th percentile (0). Sub-sample means (μ) and number of firms (N) belonging to each sample L and H are also reported in each column. All columns are based on CAARs computed for the window of days [-1,1]. Results in odd columns are based on simple sub-sample means, while in even columns are based on within-sector sub-sample means, whereas sector is defined as the firms' reported 1-digit NAICS industry code. Robust standard errors are presented in parenthesis. Robust standard errors are presented in parenthesis.

$^{*}p < 0.10,^{**} p < 0.05,^{***} p < 0.01$

C Robustness for Different Growth Measures

Our results are robust to using all sort of different lengths and measures to compute growth when it comes to measuring trends in reliance on foreign workers. In particular, we find our results to be robust when computing growth as CAGR or total growth for 1, 2 or 3 prior to 2019 and when using the total (nominal) number of LCAs as opposed to share of all employees (thus, our growth measure is indeed capturing changes in LCAs and not only on firm employment). A summary of all these results are provided in Tables C1, C2, and C3 for windows [-1,1], [-1,3] and [-1,5], respectively. They all use the median of the corresponding growth rate to define the sub-samples.

[Table C1 about here.]

[Table C2 about here.]

[Table C3 about here.]

Table C1: Event Study by CAGR Foreign Workers Hiring, Window [-1,1])

Growth Rate	N^H	μ^H	N^L	μ^L	Δ
2016-2019 CAGR LCA (share of emp)	140	-0.003	331	-0.005	-.00297***
2016-2019 CAGR LCA (total)	140	-0.003	331	-0.005	-.0026***
2016-2019 Tot. Growth LCA (share of emp)	140	-0.003	331	-0.005	-.00297***
2016-2019 Tot. Growth LCA (total)	140	-0.003	331	-0.005	-.0026***
2017-2019 CAGR LCA (share of emp)	140	-0.003	331	-0.005	-.00297***
2017-2019 CAGR LCA (total)	140	-0.003	331	-0.005	-.002*
2017-2019 Tot. Growth LCA (share of emp)	140	-0.003	331	-0.005	-.00297***
2017-2019 Tot. Growth LCA (total)	140	-0.003	331	-0.005	-.002*
2018-2019 Growth LCA (share of emp)	140	-0.003	331	-0.005	-.00338***
2018-2019 Growth LCA (total)	140	-0.003	331	-0.005	-.00296***

The replicates the results of Table 3 using different ways to compute growth rates for LCAs to compute sub-sample means μ^H and μ^L as well as the difference between them Δ. All estimations are based on CAARs computed over the window [-1,1]. Stars denote statistical significance based on robust standard errors and p-values according to: *p <0.10, ââp <0.05, âââp <0.0

Table C2: Event Study by CAGR Foreign Workers Hiring, Window [-1,3])

Growth Rate	N^H	μ^H	N^L	μ^L	Δ
2016-2019 CAGR LCA (share of emp)	140	-0.003	331	-0.005	-.00189*
2016-2019 CAGR LCA (total)	140	-0.003	331	-0.005	-.0021**
2016-2019 Tot. Growth LCA (share of emp)	140	-0.003	331	-0.005	-.00189*
2016-2019 Tot. Growth LCA (total)	140	-0.003	331	-0.005	-.0021**
2017-2019 CAGR LCA (share of emp)	140	-0.003	331	-0.005	-.0017*
2017-2019 CAGR LCA (total)	140	-0.003	331	-0.005	-.00161*
2017-2019 Tot. Growth LCA (share of emp)	140	-0.003	331	-0.005	-.0017*
2017-2019 Tot. Growth LCA (total)	140	-0.003	331	-0.005	-.00161*
2018-2019 Growth LCA (share of emp)	140	-0.003	331	-0.005	-.00165*
2018-2019 Growth LCA (total)	140	-0.003	331	-0.005	-.00205**

The replicates the results of Table 3 using different ways to compute growth rates for LCAs to compute sub-sample means μ^H and μ^L as well as the difference between them Δ. All estimations are based on CAARs computed over the window [-1,3]. Stars denote statistical significance based on robust standard errors and p-values according to: *p <0.10, ââp <0.05, âââp <0.0

Table C3: Event Study by CAGR Foreign Workers Hiring, Window [-1,5])

Growth Rate	N^H	μ^H	N^L	μ^L	Δ
2016-2019 CAGR LCA (share of emp)	140	0.001	331	-0.001	-.00171**
2016-2019 CAGR LCA (total)	140	0.001	331	-0.001	-.00205**
2016-2019 Tot. Growth LCA (share of emp)	140	0.001	331	-0.001	-.00171**
2016-2019 Tot. Growth LCA (total)	140	0.001	331	-0.001	-.00205**
2017-2019 CAGR LCA (share of emp)	140	0.001	331	-0.001	-.0012
2017-2019 CAGR LCA (total)	140	0.001	331	-0.001	-.00155*
2017-2019 Tot. Growth LCA (share of emp)	140	0.001	331	-0.001	-.0012
2017-2019 Tot. Growth LCA (total)	140	0.001	331	-0.001	-.00155*
2018-2019 Growth LCA (share of emp)	140	0.001	331	-0.001	-.00147
2018-2019 Growth LCA (total)	140	0.001	331	-0.001	-.00219**

The replicates the results of Table 3 using different ways to compute growth rates for LCAs to compute sub-sample means μ^H and μ^L as well as the difference between them Δ. All estimations are based on CAARs computed over the window [-1,5]. Stars denote statistical significance based on robust standard errors and p-values according to: *p <0.10, ââp <0.05, âââp <0.0

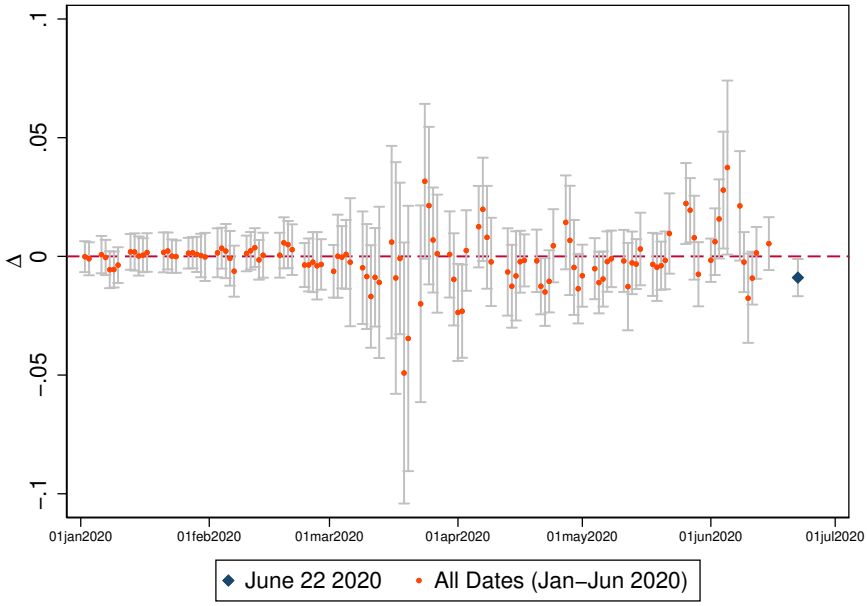
D Event studies for prior dates in 2020

An additional conservative test we perform is to make sure our estimates are indeed related to the context under consideration (the June 22 EO). In order to do so, we repeat the exercise of estimating the statistical difference in CAARs between firms with high vs. low CAGR in LCAs, referred to as Δ, for every trading day between January 1st to June 15th of 2020, a week before the event. A summary of our results are presented in Figure D. Note that the figure also includes the estimator for the EO of June 22 –the same result reported in the main body of the paper– for comparison purposes, using a diamond-shaped marker.

The figure shows that for nearly 93% of the 114 trading days between January 1st to June 15th of 2020, the estimates of Δ are statistically insignificant. There are three exceptions. The first one is April 21 and 22, when there was another announcement by President Trump restricting immigration mostly in the form of family reunification and other immigrant visas, which might as well have affected the firms in our sample. The second and third exceptions are May 26 and 27, as well as June 4 and 6, with positive point estimates for Δ. In those dates, however, the market experienced unusually large movements and therefore more volatility is expected. Thus, this exercise reinforces our belief that our main findings do reflect a market reaction to the EO under consideration, and not any idiosyncratic process that would be more frequent in the data.

[Figure D1 about here.]

Figure D1: Event studies for dates between January and June 2020



This figure plots the results of the estimation of Δ (as specified in footnote 14) using over 100 dates, all business days between January 1st to June 15th of 2020, using a 3-day (-1 to +1) window, each day represented by a round marker. The diamond-shaped marker represents the baseline result of the EO of June 22 reported in the main body of the paper, for comparison purposes. Whiskers represent 95% confidence intervals using robust standard errors.