Economic Freedom and Firm Dynamism

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Abstract

I use matching methods on a panel of U.S. states over the period 1981 - 2019 to examine the relationship between economic reform and business dynamism, where economic reform is based on large sustained increases in the Economic Freedom of North America Indices. The strongest estimates show large long-run increases in firm exits following general economic reform and large short-run decreases in firm entry following labor market reform. The former result is consistent with a Schumpeterian "creative destruction" explanation, although a sector-level analysis shows that exit growth is concentrated in the construction, retail, service, and finance sectors. The latter result is evident in nearly all sectors and implies that increases in establishment level dynamism, which previous research has shown, may be occurring within incumbent firms.

1 Introduction

Recent research has shown that economic reform at the cross-country level (Grier and Grier, 2021) and state level (Callais, 2022) has a positive effect on economic growth. Both of these works are notable for their use of economic freedom indices to define economic reform and the use of matching methods to establish causal claims. I add to this line of research by examining how general economic reform and labor market reform, defined as large sustained increases in the Economic Freedom of North America (EFNA) Index and its labor market sub-component, respectively, affect firm entry and exit.

Using a panel of U.S. states for the period 1981-2019, I identify thirty-eight episodes of general economic reform and forty-three episodes of labor market reform using the definition from Callais (2022). I then use these episodes of reform as the treatment in a matching model and test for causal evidence that economic reform affects firm entry and exit over various time horizons. The strongest results point to a large increase in exit rate growth relative to the control group ten years following general economic reform and a large short-run decline in firm entry rate growth relative to the control group following labor market reform. A sector-level analysis shows that exit rate growth following general economic reform is concentrated in the construction, retail, and service sectors, and to a lesser extent the financial services sector. Conversely, the impact of labor market reform affects nearly all industrial sectors, with the wholesale and agricultural sectors being the exception. I also find weak evidence of an increase in firm entry rate growth five years following general economic reform relative to the control group and a decrease in firm entry rate growth ten years following reform relative to the control group, but these findings are not robust to all of the matching models used.

These results help clarify existing evidence on the relationship between economic freedom and business dynamism. First, an increase in firm exits following economic reform is consistent with the Schumpeterian "creative destruction" hypothesis advanced by Campbell et al. (2007). Second, the decline in firm entry following labor market reform, when coupled with the finding of larger net establishment entry in states with less government involvement in the labor market, suggests that labor market reform is leveraged by incumbent firms, leading to what Shapiro and Yurukoglu (2024) call "competition-in-action."

2 Economic Freedom and Business Dynamism: Prior Evidence

Kreft and Sobel (2005) were the first to use the EFNA Index to study the relationship between government policy and business dynamism. They show a positive relationship between economic freedom and growth in sole proprietorships over the period 1996-2000. Campbell et al. (2007) build upon this work, but instead measure business dynamism using the firm birth and death rates over the period 1990-2001. They show that a higher economic freedom score leads to a higher firm birth rate and a higher firm death rate.[1] While their evidence for the impact on firm births is positive, the estimated effect is small and only statistically significant at the 10% level. Conversely, the estimated effect of economic freedom on the firm death rate is larger and statistically significant at the 1% level.

Barnatchez and Lester (2017) study the impact of economic freedom on economic dynamism during the period 1981 - 2013 and find that overall economic freedom and a less rigid labor market are positively correlated with gross job and establishment creation and net job and establishment creation.[2] Recently, Shakya and Plemmons (2021) analyzed the relationship between economic freedom and start-up density. They study the period 2005 - 2015 and measure start-up density using the Kauffman Startup Activities Index. In their preferred empirical specification, they find that increases in a state's labor market freedom score lead to an improvement in start-up density, whereas increases in the government spending and taxation scores, which implies less spending and tax revenue as a percentage of income, reduce start-up density. Improvements in overall economic freedom also lead to a reduction in start-up density. Bennett (2021) makes a unique contribution to this literature by studying how local economic freedom affects economic dynamism. Over the period 1977 - 2012, Bennett finds that increases in economic freedom lead to positive increases in both firm creation and job creation at the local level but no statistically significant impact on job or firm destruction.

While my paper builds upon the word of these authors, there are several notable differences. First, rather that using all annual observations of the EFNA Index directly, I follow Callais (2022) and use the EFNA Index to identify specific episodes of economic reform. Second, like Campbell et al. (2007), Bennett (2021), and Shakya and Plemmons (2021), I address the potential endogeneity between economic reform (or freedom) and business activity. However, like Callais (2022) I use a matching approach whereas Campbell et al. (2007) and Bennett (2021) use instrumental variables strategies, and Shakya and Plemmons (2021) uses LASSO regressions. Third, in the spirit of Campbell et al. (2007) and Bennett (2021), I focus on dynamism at the firm level. Conversely, Kreft and Sobel (2005) study sole proprietorships, Shakya and Plemmons (2021) examine start-up density, and Barnatchez and Lester (2017) explore dynamism at the establishment level. Tian (2018) discusses several reasons why making a distinction between establishments, which are physical locations where economic activity occurs, and firms, which are composed of one or more establishments, is important. For example, changes in the number of establishments could arise because firms are being created and destroyed or because an existing firm is expanding or shrinking. Thus, overall economic freedom and labor market freedom could be associated with the creation of more establishments and jobs that are primarily created by larger firms. Fourth, I examine firm entry and exit in different industrial sectors in addition to overall firm entry and exit. Finally, I estimate the relationship between economic reform and firm entry and exit rates across 3-year, 5-year, 7-year, and 10-year horizons. Conversely, the other papers referenced here focus on short-term dynamism.

In total, my results complement the work of these authors and provides additional evidence regarding how economic freedom affects business dynamism.

[1] Campbell et al. measure the firm birth and death rates as the number of new firms or firm exits, respectively, as a percentage of all firms. However, the authors do not specify whether all firms are measured as of the previous year or the current year.

[2] Barnatchez and Lester (2017) follow Davis and Haltiwanger (1992, 1999) and define gross creation as the sum of jobs or establishment created and destroyed and net creation as difference between jobs or establishments created and destroyed, respectively.

3 Data and Variables

3.1 Variables Measuring Firm Dynamism

I create state-level firm entry and exit rates using data from the U.S. Census Bureau's Business Dynamics Statistics (BDS) Database. Following Tian (2018), the annual firm entry and exit rates for each state are calculated as follows:

$$\text{Firm Entry Rate}_{st} = \frac{\text{Age 0 Firms}_{st}}{\text{All Firms}_{st-1}} \times 100. \tag{1}$$

$$\text{Firm Exit Rate}_{st} = \frac{\text{Firm Deaths}_{st}}{\text{All Firms}_{st-1}} \times 100. \tag{2}$$

In Equation 1, Age 0 Firms are newly established firms as of year t. In Equation 2, Firm Deaths represent the number of firms that closed all establishments and ceased to exist as a legal entity as of year t. In each equation All Firms are incumbent firms that existed at the end of year $t-1$.

Figures 1 shows the average firm entry rate over the sample period, as well as those for the different industry sectors available in the BDS. The average firm entry rate declines between 1981 and 2009 and then stabilizes from 2009 until 2019, with entry rate fluctuation around 7.5%. Unsurprisingly, the periods where the average entry rate stabilizes, or briefly increases, are during periods of economic expansion. The entry rates for most industrial sectors behave similarly with the exception of manufacturing and wholesale, which decrease over the entire sample period.

The average firm exit rate, shown in Figure 2, also decreases over the sample period and displays some cyclicality, with brief increases in the average rate during periods of economic contraction. However, the rate also slightly increases in some years associated with economic expansion. As with the average entry rate, the average exit rate across sectors generally declines over the sample period as well, albeit with some industries that always have above average exit rates and others that always have below average exit rates.

3.2 Determining Economic Reform

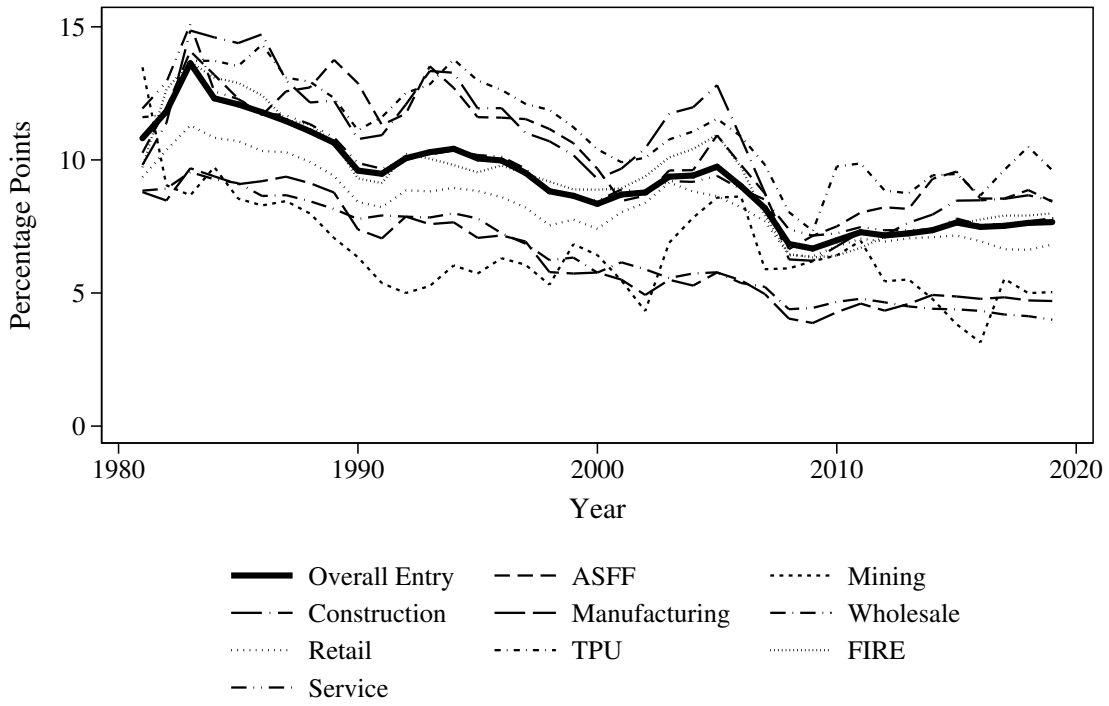
The Fraser Institute's 2023 Economic Freedom of North America (EFNA) Sub-National Index is used to determine episodes of economic reform.[3] While the 2023 release provides ratings for all fifty states between 1981 - 2021, I only use data up through 2019 in order to avoid complications caused by the Covid-19 pandemic.

A state's overall economic freedom score can range from 10, indicating the highest level of economic freedom, to 0, indicating the lowest level of economic freedom. This overall score is the sum of three equally weighted components: *Government Spending* (Area 1), which includes government consumption, transfers and subsidies, and insurance and retirement payments, all as a percentage of income; *Taxes* (Area 2), which includes income, payroll, property, sales, and other taxes as a percentage of income, as well as the top marginal income tax rate and the income level to which it applies; and *Labor Market Freedom* (Area 3), which includes minimum wage legislation, government employment as a percentage of total state employment, and union density. The EFNA Index emphasizes an inverse relationship between economic freedom and government involvement in the economy. Thus, a higher score in Areas 1, 2, and 3 imply less government spending as a percent of income, lower taxes as a percent of income, and less government-induced labor market rigidity, respectively. In general, a higher overall EFNA score implies a smaller government.

Unlike some policy changes, the occurrence of an economic reform is not always clear-cut. For example, a policy change can take multiple years before it is fully implemented or reform can entail multiple changes in law or regulation that only have large economic effects when done in concert with one another. Thus, both Grier and Grier (2021) and Callais (2022) devise ways to use large and sustained changes in economic freedom index scores to proxy for the existence of economic reform.

[3]The Fraser Institute produces an all-government index for North America as well, but this index is not appropriate for comparisons between the states. See Stansel et al. (2023).

Figure 1: Average Firm Entry Rate: 1981 - 2019



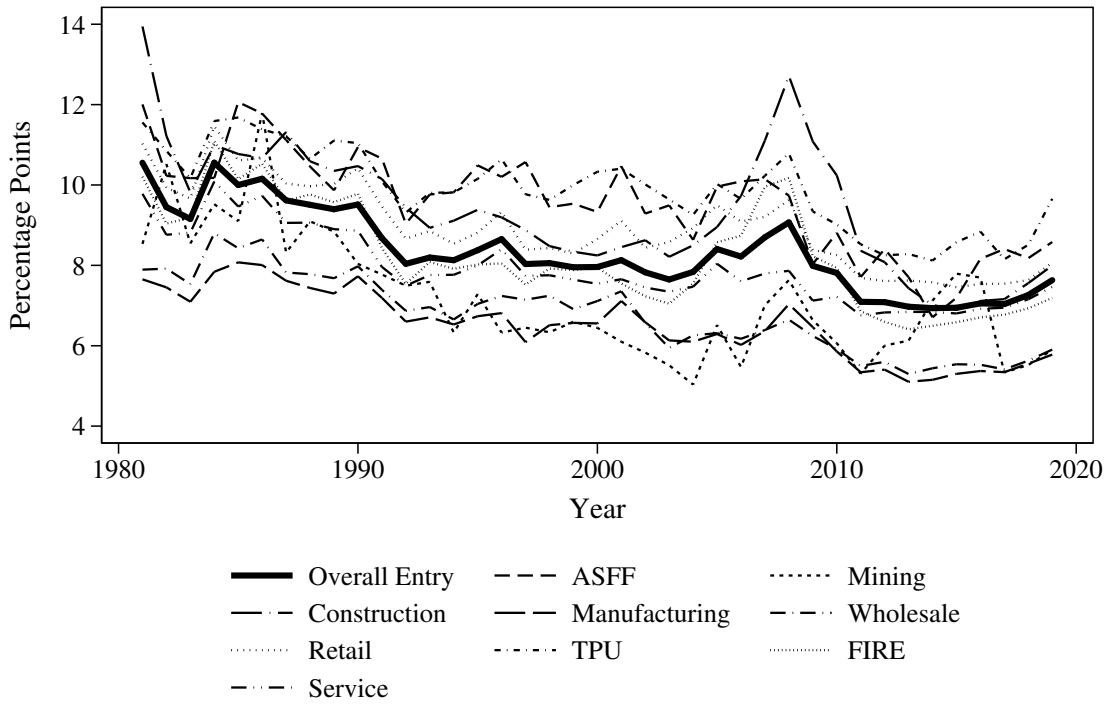
The figure plots the unweighted overall average firm entry rate across all states and the average unweighted firm entry rate across all states for specific sectors. The firm entry rate is calculated as the number of new firms in year t divided by the number of firms that existed at the end of year $t-1$. Data are from the U.S. Census Bureau's Business Dynamics Statistics.

In Callais (2022), an economic reform occurs when the five-year increase in a state's overall EFNA score is one point or greater and then maintains at least half of this increase over each year of the subsequent five year period. I follow this approach, but like Grier and Grier (2021) require the reform to be sustained over a ten year period.[4] For example, between 1993 and 1998, Colorado's overall EFNA score increased from 6.26 to 7.37. Then, in each year between 1999 and 2009, its overall ENFA score never fell below 6.82. Thus, Colorado is considered to have experienced an economic reform in 1998. Conversely, whereas Alabama's overall EFNA score increased from 5.57 in 2001 to 6.84 in 2005, by 2009 its score had fallen to 5.87. Thus, Alabama's increase was not sustained and is not considered an economic reform. If a state experiences multiple sustained increases in overall economic freedom during the same five year period, only the initial year of reform is kept. Thus, even though Colorado experienced a sustained five-year increase in its overall EFNA score in 2000, this observation is dropped since Colorado first experienced an economic reform in 1998. However, a state can experience multiple episodes of economic reform if the reforms are separated by ten or more years. Thus, since Colorado experienced an economic reform in 1998, observations for the years 1993 - 1997 and 1999 - 2007 are removed. However, since the sustained economic reform that Colorado experienced in 2015 occurred more than ten years following the 1998 reform, it will be considered a treated observation.

The states and years in which an economic reform was experienced and the increase in the overall EFNA score are presented in Table 1. The sample contains thirty-eight instances of economic reform ranging from a low of 1.00 experienced by Hawaii in 2000 to a high of 1.46 experienced by Washington in 2015. The

[4] I choose the stronger criteria used by Grier and Grier (2021) to ensure as much consistency as possible in the treated units across the analyses of firm entry and exit rates.

Figure 2: Average Firm Exit Rate: 1981 - 2019



The figure plots the unweighted overall average firm exit rate across all states and the average unweighted firm exit rate across all states for specific sectors. The firm exit rate is calculated as the number of firm deaths in year t divided by the number of firms that existed at the end of year $t-1$. Data are from the U.S. Census Bureau's Business Dynamics Statistics.

episodes of reform shown in Table 1 are similar to the reforms identified by Callais (2022), but there are differences since the updated EFNA dataset I use includes years that were unavailable in the 2019 version used by Callais (2022). Additionally, scores vary slightly from year-to-year. For example, New Hampshire's overall EFNA score for 2017 is 7.93 in the 2019 version, but falls to 7.78 in the 2023 release. These small changes in the scores are the reason why Callais (2022) considers Kansas to have experienced an economic reform in 1999 but I do not.[5]

Episodes of labor market reform are presented in Table 2. I apply the same criteria used to determine episodes of general economic reform, except that a state's five-year change in labor market freedom must equal or exceed 1.57, which is the standard deviation of the labor market freedom index over the sample period. There are forty-three episodes of labor market reform during the sample period. The smallest five-year increase associated with labor market reform was 1.59, which occurred in Colorado in 1986 and Idaho in 1996. The largest sustained five-year increase in labor market freedom was 2.81, which occurred in Maryland in 1986.

[5]Like Callais (2022), I do not focus on episodes of government spending reform or taxation reform in this paper. In the case of government spending reform, the difference in entry and exit growth rates between treated and control states were almost always statistically insignificant. In the analysis of taxation reform, the point estimates from the logit model used to estimate propensity scores were jointly insignificant, yielding little confidence in the matching results based on these estimates. These results are available in Section C of the appendix.

Table 1: Episodes of Economic Reform

State	Year	Increase	State	Year	Increase
Arizona	1997	1.20	Montana	2000	1.06
Colorado	1998	1.11	Nevada	1998	1.18
Colorado	2015	1.08	Nevada	2015	1.08
Connecticut	2000	1.20	New Hampshire	1997	1.02
Delaware	1986	1.30	New Jersey	1998	1.04
Florida	2014	1.06	North Carolina	2015	1.10
Georgia	2015	1.14	North Dakota	2002	1.06
Hawaii	2000	1.00	Ohio	1998	1.12
Idaho	2014	1.14	Ohio	2015	1.05
Illinois	1988	1.31	Oklahoma	2000	1.01
Indiana	2015	1.22	Pennsylvania	1988	1.21
Iowa	1998	1.31	South Carolina	2014	1.02
Kansas	2015	1.01	Utah	2015	1.37
Maryland	1986	1.08	Washington	2015	1.46
Massachusetts	1986	1.24	West Virginia	1998	1.10
Massachusetts	1998	1.17	Wisconsin	1998	1.11
Michigan	1987	1.01	Wisconsin	2014	1.24
Michigan	2014	1.32	Wyoming	1997	1.26
Minnesota	1998	1.10	Wyoming	2015	1.13

An economic reform is determined based on the criteria described in Section 3.2. The calculation of the change in economic freedom used to evaluate the existence of an economic reform is described in Section 3.2.

3.3 Covariates

The matching methods I employ rely on several covariates to create an acceptable control group with which to compare episodes of economic reform. Following Grier and Grier (2021), I choose covariates that are plausibly related to either the outcome variables, the occurrence of an economic reform, or both. All of the control variables are lagged by five years to ensure that I am capturing economic, demographic, and political conditions that existed at the start of a reform. For example, in the case where economic reform occurred in Oklahoma in the year 2000, the covariates used to select acceptable controls in the matched sample are from the year 1995 for both Oklahoma and any potential control observations in the year 2000. Summary statistics for these variables are provided in Table 3.

A state's economic freedom score reflects the economic and regulatory environment in which business owners and managers choose to operate. Additionally, a state that already enjoys a high level of economic freedom might be less likely or able to pass additional economic reform. Thus, I include the level of overall economic freedom that existed prior to an episode of economic reform as a covariate. On average, the overall economic freedom score for the entire sample period lies approximately halfway between the lowest potential economic freedom score and the highest.

Firm entry or exit that occurs after a period of reform could simply reflect business conditions that existed prior to reform. Furthermore, existing business conditions could influence economic policy. Thus, the entry or exit rate from the period prior to economic reform is also included as a covariate.

Compton et al. (2011) find a direct relationship between changes in economic freedom scores and economic growth. Furthermore, economic growth, or the absence of growth, could also be correlated with state policymakers' ability or desire to enact reform. By including real personal income per capita growth as a covariate I can better account for these economic conditions that exist in the period prior to reform. Real personal income per capita is gathered from the Bureau of Economic Analysis.

Population growth is included as a covariate to account for demographic factors that are correlated with firm dynamics. Hopenhayn et al. (2022) show that for the United States as a whole, declining population growth leads to declining firm entry rates. Over time, population declines in some states and rises in others,

Table 2: Episodes of Labor Market Reform

State	Year	Increase	State	Year	Increase
Alabama	1996	1.79	Nevada	1987	1.93
Arizona	1987	2.09	New Hampshire	1986	2.16
Arkansas	1996	1.61	New Jersey	1986	2.40
California	1986	1.86	New Jersey	2000	1.62
Colorado	1986	1.59	New York	1986	1.64
Connecticut	1986	2.12	North Carolina	1989	1.77
Delaware	1986	1.88	North Dakota	1996	1.81
Florida	1986	1.67	North Dakota	2014	1.94
Georgia	1987	1.80	Oklahoma	2004	1.76
Hawaii	1987	1.75	Oregon	1996	2.17
Idaho	1996	1.59	Pennsylvania	1988	1.76
Illinois	1987	1.68	South Carolina	2015	1.75
Indiana	1996	2.06	South Dakota	1996	1.87
Iowa	1989	1.65	Tennessee	1996	1.69
Kansas	1987	1.63	Utah	1998	1.69
Maine	1996	1.86	Utah	2015	1.70
Maryland	1986	2.81	Virginia	1986	2.25
Massachusetts	1986	1.98	Washington	1988	1.62
Michigan	1987	1.61	West Virginia	1998	1.61
Missouri	1989	1.70	Wisconsin	2015	1.88
Montana	1996	1.72	Wyoming	1996	1.86
Nebraska	1989	1.77			

A labor market reform is determined based on the criteria described in Section 3.2. The calculation of the change in labor market freedom used to evaluate the existence of a labor market reform is described in Section 3.2.

Table 3: Summary Statistics

	Obs.	Mean	SD	Min	Max
3 Year Entry Growth Rate	1796	-3.82	13.71	-69.06	45.25
5 Year Entry Growth Rate	1696	-6.86	16.48	-70.04	53.46
7 Year Entry Growth Rate	1596	-10.23	16.31	-66.17	63.84
10 Year Entry Growth Rate	1446	-15.23	13.60	-70.87	71.40
3 Year Exit Growth Rate	1796	-2.34	10.56	-47.56	37.42
5 Year Exit Growth Rate	1696	-4.70	12.64	-64.56	41.37
7 Year Exit Growth Rate	1596	-7.16	13.69	-69.50	48.68
10 Year Exit Growth Rate	1446	-10.57	12.62	-64.70	30.44
Overall EFNA	1696	5.68	1.01	2.75	8.05
Firm Entry Rate	1796	9.78	2.45	4.76	22.72
Firm Exit Rate	1796	8.66	1.45	5.28	16.33
Real Personal Income Per Capita (2010 $)	1946	35894.19	7805.68	18973.57	63911.75
Pop. Growth	1946	1.03	1.16	-5.61	11.55
Manufacturing Share of Income (%)	1946	12.09	6.37	0.00	34.62
Gov't Share of Income (%)	1946	13.82	3.52	7.67	32.09
Gov't Ideology	1946	50.07	13.27	17.51	73.62

The calculation of firm entry and exit growth rates are described in Section 3. Overall EFNA, Firm Entry Rate, Firm Exit Rate, Real Personal Income Per Capita, Population Growth, Manufacturing Share of Income, Gov't Share of Income, and Government Ideology are lagged by five years.

which can be correlated with firm entry and exit rates, particularly for sectors such as construction, retail, and services that are dependent on local populations. Annual population growth is from the U.S. Census

Bureau.

Like, Callais (2022), I also include covariates measuring the manufacturing sector's share of state income and federal, state, and local government's share of state income, respectively. These variables are created using data from the Bureau of Economic Analysis and help account for economic, and in the case of government's share, political conditions that existed prior to reform. For example, *ceteris paribus*, a state in which government's share of income is higher might be less inclined to pass an economic reform that reduces the size of government. Conversely, a state with a larger manufacturing sector might be more inclined to adopt economic reforms that are favorable to this sector.

Finally, government ideology measures a state government's ideological rating along a liberal-conservative spectrum, where a lower rating indicates a more conservative government and a higher rating indicates a more liberal government. This variable is from Fording (2015). Political ideology proxies for existing political conditions that could influence a state's business environment and the likelihood of economic reform. The literature on the relationship between political ideology and economic freedom is mixed, with some authors (Bjørnskov and Potrafke, 2013; Raff et al., 2024) finding meaningful correlations between some economic freedom scores and political control of different branches of government and others (Gu et al., 2017; Hankins and Hoover, 2019) finding little-to-no evidence of a relationship between economic freedom and political ideology.[6]

4 Empirical Approach

Episodes of economic reform and labor market reform are used as treatment variables in a matching framework to estimate the effect of reform on firm entry and exit rates. This approach was first used by Grier and Grier (2021) to estimate the effect of reform on per capita economic growth across multiple countries and later by Callais (2022), who estimates how economic reform affects net income per capita growth at the state level.

The pool of potential control observations begins will all observations in which a reform did not occur. Following Callais (2022), some observations from states experiencing economic reform are removed so that they do not appear as control observations. First, as discussed in Section 3.2, in the event a state experiences consecutive five-year increases in economic freedom that are large enough to constitute a reform, only the initial year of reform is considered a treatment variable. However, these observations are also dropped from the pool of control observations. Second, observations in which the five year increase in overall economic freedom constitutes an economic reform, but the reform is not sustained are dropped. For example, the 2005 observation for Alabama, discussed in Section 3.2, is dropped since the reform is not maintained in each year between 2005 and 2015. Third, for any observation in which an economic reform occurs, the five years preceding reform and the ten years following reform are removed. Finally, observations for which the five-year increase in overall economic freedom is between 0.5 and 1 are removed.[7] All of these modifications are done to avoid potentially contaminating the control group with observations where anticipatory or lingering effects of economic reform impact firm dynamics. Failing to remove these observations from the pool of potential control units could lead to biases in the matching process.

Grier and Grier (2021) point out several advantages that matching methods have over linear regression when using indexes like the EFNA Index to analyze economic outcomes. First, they argue that the construction of economic freedom indexes, which limits data values to a range between 0 (lowest level of freedom) and 10 (highest level of freedom), makes linear regression ill-suited for uncovering relationships between economic freedom and economic outcomes. Second, they point to work by Goodman-Bacon (2021) and De Chaisemartin and d'Haultfoeuille (2020) showing that treatment effects estimated from a two-way fixed effects (TWFE) model are biased in the presence of treatment effect heterogeneity and negative treatment effect weights. While researchers have developed estimators that are robust to treatment effect heterogeneity, negative treatment effect weights, and other complications inherent to the TWFE estimator, these methods

[6] Hankins and Hoover (2019) show some graphical evidence of differences between Republican and Democratic governors who win by very large margins, but these differences cannot be attributed to the party of the governor in a causal sense.

[7] Callais (2022) refers to these observations as "almost treated" units. I will use the same terminology.

can be data intensive and require specific assumptions that can be hard to satisfy.[8]

Conversely, matching offers a straight-forward way to compare average outcomes between treated and untreated units that are as similar as possible except for the treatment under consideration. Using matching methods, a researcher can also remove treated units that do not have matches among the control units and avoid making inferences based on extrapolation. I will use these techniques to match each state in the year of economic reform to control observations that meet the conditions described above. The difference between the average firm entry or exit outcome following economic reform and the average outcome for control observations is the average treatment effect on the treated (ATT), or the impact on firm entry and exit in states experiencing an economic reform.

Despite the reasons why matching is appropriate for assessing the relationship between economic freedom and economic outcomes, matching can only select appropriate control observations based on observable factors. Grier and Grier (2021) and Callais (2022) overcome this issue by differencing the outcome variable in order to remove the effect of unobservable time-invariant factors, a method recommended by An and Winship (2017).[9] I also adopt this approach and calculate log differences in firm entry and exit rates, respectively, to create 3-year, 5-year, 7-year, and 10-year growth rates in firm entry and exit relative to each year.[10] Table 3 and Figures 3 and 4 provide some information about how these growth rates behave over the sample period. On average, the entry and exit growth rates are negative and are larger in magnitude over longer time horizons. However, there are periods of large positive growth in both entry and exit rates over the sample period.

The actual matching procedure is accomplished using propensity score matching and Mahalanobis matching. Propensity scores are estimated using a logit model that regresses treatment status on the state-level characteristics discussed in Section 3.3. The propensity scores are then used to match the treated observations to control observations based on the proximity of the propensity scores. Proximity is determined by matching each treated observation to its nearest neighbor, the average of its nearest two neighbors, and the average of its nearest three neighbors, respectively. Finally, any treated or control units that lie outside the range of common support, i.e. treated (control) observations with a propensity score that lie outside the distribution of the control (treated) group propensity scores, are dropped.

The Mahalanobis method matches treated observations to control observations by minimizing the covariance-weighted distance between covariates. Treated observations are matched to the nearest neighbor, nearest two neighbors, and nearest three neighbors, respectively. When the nearest two and three neighbor methods are used, the Mahalanobis method matches the treated observation to the average of the nearest two and nearest three neighbors, respectively. Unlike the propensity score method, the Mahalanobis method uses all treated and control observations.

5 Results

5.1 Covariate Matching and Propensity Score Estimates

The estimated coefficients from the logit model used in the propensity score matching procedure are presented in Table 4. Columns 1 and 2 show results for overall economic reform and columns 3 and 4 show results for labor market reform.

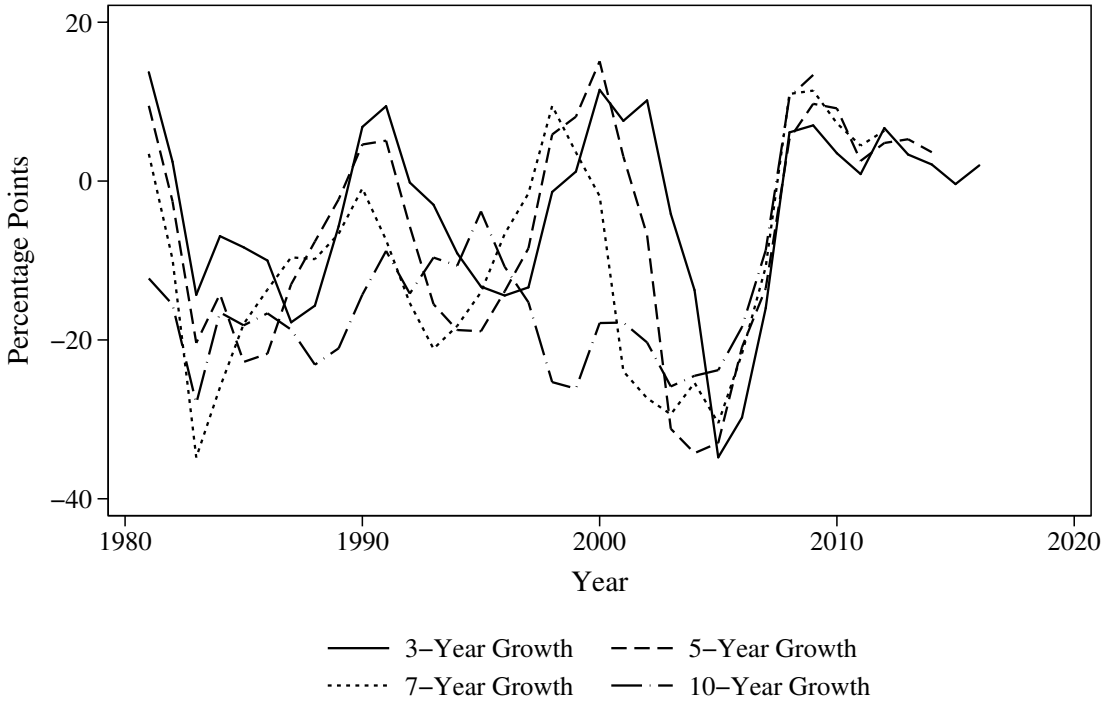
Overall economic freedom is inversely related to economic reforms in both the entry rate and exit rate models, suggesting that a state with a high level of economic freedom is less likely to experienced a sustained economic reform. In column 1, the point estimate on the firm entry rate is also negative, which implies that a state with a relatively high proportion of new firms is less likely to experience sustained economic reform. Even though the entry rate is significantly related to economic reform, the exit rate is not. While

[8] See for example De Chaisemartin and d'Haultfoeuille (2020) and Callaway and Sant'Anna (2021), among many others.

[9] Specifically, differencing the outcome variable removes the effect of time-invariant unobservable characteristics on the level of the outcome variable.

[10] For example, the 3-year firm entry (exit) growth rate for the year 2010 is calculated as the difference between the logged firm entry rate in 2013 and the logged firm entry rate in 2010. The 5-year growth rate is calculated as the difference between the logged firm entry rate in 2015 and the logged firm entry rate in 2010, etc.

Figure 3: Average Firm Entry Growth Rates: 1981-2019



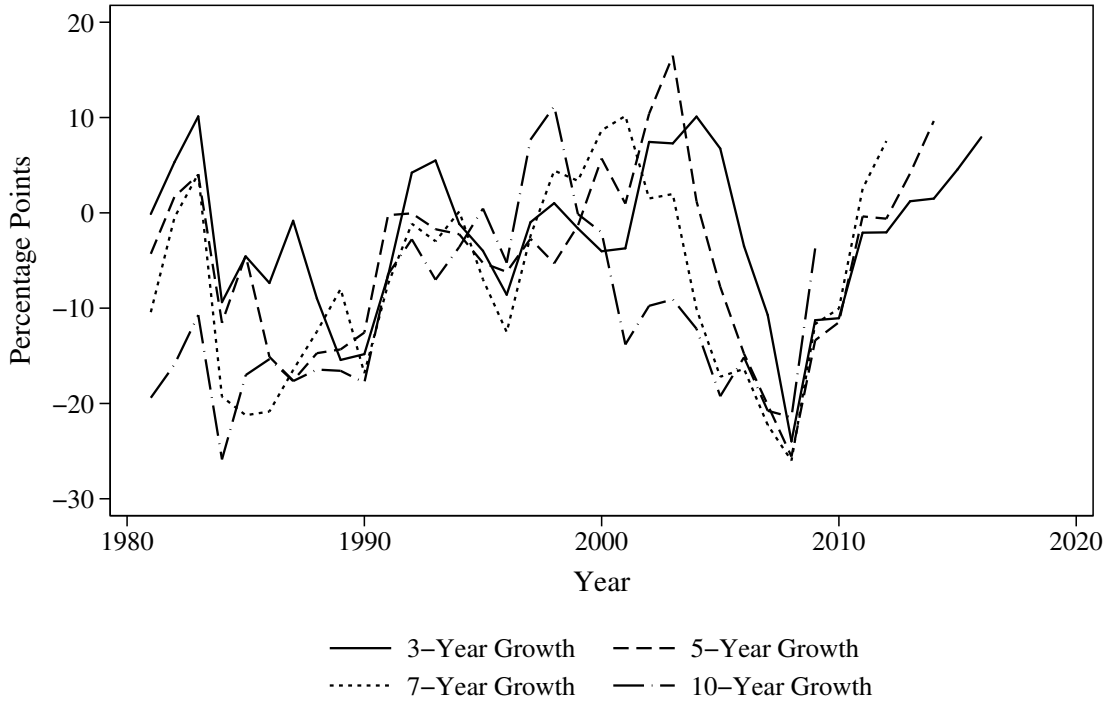
The figure plots the unweighted average of 3-year, 5-year, 7-year, and 10-year growth rate of the firm entry rate across all states. The growth rates are calculated as the log difference between year $t + j$, where $j = 3, 5, 7$, or 10 and year t. The growth rates are expressed in percentage points. Data are from the U.S. Census Bureau's Business Dynamics Statistics.

Table 4: Logit Results From Entry and Exit Rate Matching Models

	Overall		Labor Market	
	Entry	Exit	Entry	Exit
Overall Freedom$_{t-5}$	-1.6146***	-1.5471***	-0.6412***	-0.6455***
Entry$_{t-5}$	-0.4641***	–	-0.387	–
Exit$_{t-5}$	–	-0.2744*	–	-.0778
ln Real Income Per Capita$_{t-5}$	-0.7159	-0.1078	-3.8294***	-4.0369***
Population Growth$_{t-5}$	0.4292**	0.1842	0.4903***	0.4775***
Manufacturing Share of Income (%)$_{t-5}$	-0.0273	-0.0592	0.0652*	0.0603*
Gov't Share of Income (%)$_{t-5}$	-0.1668**	-0.2103***	-0.0331	-0.0354
Government Ideology$_{t-5}$	-0.0755***	-0.0757***	-0.0141	-0.0148
Constant	23.2528	15.8743	40.4135***	43.0356***
Observations	867	867	870	870
Pseudo R^2	0.24	0.19	0.16	0.16

* $p < .10$, ** $p < .05$, *** $p < .01$. The dependent variable in all regressions is a dummy variable equal to one if the state experiences sustained reforms as described in Section 3.2 and zero otherwise. The coefficient estimates are from the logit regression results from the propensity score matching model using the three year growth rate in either the firm entry rate (columns 1 and 3) or the firm exit rate (columns 2 and 4). All covariates are lagged by five years. The logit model was estimated using the Stata command `psmatch2`. Full results available upon request.

Figure 4: Average Firm Exit Growth Rates: 1981-2019



The figure plots the unweighted average of 3-year, 5-year, 7-year, and 10-year growth rate of the firm exit rate across all states. The growth rates are calculated as the log difference between year $t + j$, where $j = 3, 5, 7,$ or 10 and year t. The growth rates are expressed in percentage points. Data are from the U.S. Census Bureau's Business Dynamics Statistics.

the signs on the point estimates are consistent across the columns 1 and 2, the statistical significance is not. Interestingly, the logit specification with the exit rate included as a covariate yields results most similar to Callais (2022). In particular, both the government sector's share of income and government ideology are inversely related to economic reform.

The logit specifications for labor market reform yield more consistent point estimates. Overall economic freedom is inversely related to labor market reform, again implying that a state with a high level of overall freedom is less likely to experience additional labor market reform. Real income per capita is also inversely related to labor market reform, which implies that a state with higher real income is less likely to experience labor market reform. Finally, population growth is directly related to labor market reform. In other words, a state with higher population growth is more likely to experience sustained labor market reform.

5.2 The impact of reform on firm entry and exit rates

The estimates of the effect of economic reform on the growth in firm entry and exit rates are presented in Table 5. For the propensity score estimates of the effect on the entry rate, one treated unit, South Carolina, lies outside the region of common support for the 3-year and 5-year estimates. All treated units lie within the region of common support for the 7-year and 10-year entry rate growth estimates. For the propensity score estimates of the effect on the exit rate, Montana (2000) and Ohio (1998) lie outside the region of common support for all exit rate estimates and West Virginia (1998) and Wisconsin (1998) lie outside the region of common support for the 7-year and 10-year exit rate estimates.

The estimates of the effect of labor market reform on firm entry and exit rates are presented in Table 6.

For the propensity score estimates, all treated units lie within the region of common support.

In both Table 5 and Table 6, the standard errors from the propensity score matching models are estimated via bootstrapping with 1,000 replications. Abadie and Imbens (2011) robust standard errors are used to calculate the standard errors in the Mahalanobis matching model. Finally, following the recommendation from Abadie and Imbens (2006), the Mahalanobis estimates are adjusted for large-sample bias to account for biases that could result from matching on multiple continuous covariates.

In Table 5, the estimated effect of economic reform on the 3-year growth in the firm entry rate is inconsistent across the two matching algorithms and never statistically significant. The estimates of the 5-year and 7-year growth rates are positive, but the 5-year estimates are only statistically significant under Mahalanobis matching and the 7-year estimates are only statistically significant when estimated by the nearest 3-neighbor propensity score matching model. The estimate of the 10-year growth in the firm entry rate following economic reform is negative and statistically significant when estimated by the Mahalanobis 2- and 3-neighbor matching algorithms.

The short- and long-run estimates of firm exit rate growth are positive and become larger as the growth horizon increases. However, only 10-year growth in the firm exit rate is statistically significant across all matching algorithms, suggesting that the firm exit rate growth is between 9 - 17.93 percentage points larger ten years following reform compared to the counterfactual in which reform did not occur. This estimated treatment effect is large, ranging between approximately three quarters to one and one-third the standard deviation in 10-year exit rate growth shown in Table 3.

Table 6 suggests that labor market reform has a larger and more immediate effect on firm entry. Specifically, column 1 shows that the 3-year growth of the firm entry rate is approximately 10.50 - 13.60 percentage points lower compared to the counterfactual in which labor market reform does not occur while growth in the 5-year firm entry rate is approximately 10.60 - 15.74 percentage points lower. The 3-year estimates range from between 77% - 99% of the standard deviation in the 3-year entry growth rate while the 5-year estimates range from between 64% - 96% of the standard deviation for the 5-year entry growth rate. The estimates of the 7-year and 10-year growth rates are also negative, but become smaller and are only statistically significant when estimated using the Mahalanobis matching model. While the matching estimates from the Mahalanobis model imply that the 3-year growth in the firm exit rate is larger following labor market reform, the estimates from the propensity score model are statistically insignificant. Furthermore, the estimates of the 5-year, 7-year, and 10-year growth rates are statistically insignificant, and often relatively small, regardless of which matching algorithm is used.

5.3 Balancing Tests

Propensity score matching provides a straight-forward way to test whether the observable characteristics measured by the covariates are balanced between the treatment and control groups. Conducting this test is important, because significant differences between the treatment and control groups in the matched sample leave open the possibility that differences in the outcome variable are due to characteristics other than the occurrence of economic reform. The null hypothesis for these tests is that the covariate averages between the treatment and control groups in the matched sample are not statistically different. Tables 7 and 8 show that the treatment and control groups from the matched sample are sufficiently balanced.

Tables 9 and 10 show the balancing tests between the treated and control groups for each covariate from the estimates of the 3-year firm entry growth rate following economic reform and labor market reform, respectively.[11] The average level of economic freedom prior to reform, the average firm entry rate prior to reform, and average government ideology prior to reform show significant differences between the treated and control groups in the unmatched sample. Importantly, none of the covariate averages are significantly different between treated and control groups once matching occurs. In fact, the smallest p-value for the

[11] The balancing tests for the other matching estimates presented in Tables 5 and 6 generally show no statistically significant differences between treated and control groups in the matched sample. The one exception is the balancing test from the nearest neighbor matching estimates for the 5-year firm exit rate following labor market reform in which population growth in the matched sample is statistically different with a p-value of 0.044. However, average population growth in the treatment and control groups in the matched sample were not statistically different in the nearest 2- and 3-neighbor matching estimates. The additional balancing tests for the nearest-neighbor matching models are provided in Section C of the appendix.

Table 5: Effect of Economic Reform on Firm Dynamism

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-1.038	5.807	8.480	-10.35*
	(4.119)	(6.002)	(5.768)	(6.052)
PSM: Nearest 2-Neighbors	-0.429	6.113	9.943*	-6.480
	(3.549)	(5.389)	(5.316)	(5.281)
PSM: Nearest 3-Neighbors	1.722	5.566	10.81**	-6.608
	(3.412)	(5.045)	(4.986)	(4.888)
Mahalanobis: Nearest Neighbor	6.967*	12.57**	5.778	-9.201*
	(4.219)	(5.811)	(3.880)	(5.163)
Mahalanobis: Nearest 2-Neighbors	5.951	9.141**	5.119	-12.52***
	(3.663)	(4.433)	(3.316)	(4.373)
Mahalanobis: Nearest 3-Neighbors	5.083	10.57**	3.550	-10.63**
	(3.242)	(4.317)	(3.045)	(4.248)
Exit Rate Growth				
PSM: Nearest Neighbor	4.436	8.368*	10.73**	11.73**
	(3.428)	(4.653)	(4.995)	(5.513)
PSM: Nearest 2-Neighbors	3.890	8.293**	8.984*	16.42***
	(2.964)	(3.911)	(4.856)	(4.981)
PSM: Nearest 3-Neighbors	4.592*	6.537*	8.287 *	15.01***
	(2.612)	(3.516)	(4.354)	(4.685)
Mahalanobis: Nearest Neighbor	4.720	5.945*	6.549	9.033***
	(3.136)	(3.538)	(4.021)	(4.284)
Mahalanobis: Nearest 2-Neighbors	5.709**	4.067	15.98***	15.50***
	(2.258)	(2.796)	(2.714)	(3.230)
Mahalanobis: Nearest 3-Neighbors	6.783***	5.637**	11.88***	17.93***
	(1.981)	(2.323)	(3.213)	(3.431)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: all treated observations lie in the region of common support except for South Carolina (2014) in the 3-year and 5-year entry rate matching models, Montana (2000) and Ohio (1998) for all exit rate estimates, and West Virginia and Wisconsin (1998) for 7-year and 10-year exit rate estimates; standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: all treated observations are used; estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table 6: Effect of Labor Market Reform on Firm Dynamism

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-13.59***	-8.367*	-2.945	-3.977
	(3.424)	(4.339)	(4.014)	(3.444)
PSM: Nearest 2-Neighbors	-12.68***	-10.56***	-3.325	-3.494
	(3.112)	(3.789)	(3.572)	(3.124)
PSM: Nearest 3-Neighbors	-10.49***	-11.61***	-5.574*	-3.280
	(2.832)	(3.587)	(3.253)	(2.929)
Mahalanobis: Nearest Neighbor	-10.63***	-15.74***	-6.654**	-5.523**
	(2.207)	(2.562)	(2.756)	(2.759)
Mahalanobis: Nearest 2-Neighbors	-11.71***	-15.20***	-7.281***	-5.587**
	(2.069)	(2.786)	(2.625)	(2.472)
Mahalanobis: Nearest 3-Neighbors	-11.30***	-14.92***	-6.890***	-4.494**
	(1.892)	(2.630)	(2.511)	(2.277)
Exit Rate Growth				
PSM: Nearest Neighbor	1.763	0.872	-3.902	1.036
	(2.848)	(3.100)	(3.787)	(3.235)
PSM: Nearest 2-Neighbors	0.915	0.814	-3.007	0.377
	(2.550)	(2.811)	(3.323)	(2.985)
PSM: Nearest 3-Neighbors	1.092	0.0795	-2.805	0.410
	(2.413)	(2.592)	(2.983)	(2.708)
Mahalanobis: Nearest Neighbor	4.161**	2.749	-3.480	1.099
	(1.870)	(1.990)	(3.033)	(2.528)
Mahalanobis: Nearest 2-Neighbors	6.052***	3.609*	-3.409	-0.0624
	(1.948)	(2.079)	(2.702)	(2.277)
Mahalanobis: Nearest 3-Neighbors	5.593***	3.221*	-3.082	-0.208
	(1.779)	(1.928)	(2.612)	(2.050)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: all treated observations lie in the region of common support; standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: all treated observations are used; estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

matched sample in Table 9 is $p = 0.16$, which is well outside of acceptable levels of statistical significance. Table 10 also shows that the average level of economic freedom prior to labor market reform, the average firm entry rate prior to reform, income per capita prior to reform, and manufacturing's share of state income

Table 7: Overall Covariate Balance for Economic Reform

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry				
PSM: Nearest Neighbor	5.58	3.15	7.76	2.84
	[0.590]	[0.871]	[0.354]	[0.900]
PSM: Nearest 2-Neighbors	4.05	1.90	0.66	0.76
	[0.774]	[0.965]	[0.999]	[0.998]
PSM: Nearest 3-Neighbors	1.21	1.60	0.91	0.23
	[0.991]	[0.979]	[0.996]	[1.000]
Exit				
PSM: Nearest Neighbor	3.19	0.91	6.77	4.00
	[0.867]	[0.996]	[0.453]	[0.780]
PSM: Nearest 2-Neighbors	1.34	1.79	3.32	1.42
	[0.987]	[0.971]	[0.854]	[0.985]
PSM: Nearest 3-Neighbors	0.74	0.80	3.64	0.59
	[0.998]	[0.997]	[0.821]	[0.999]

The table reports the χ^2 covariate balance test statistic for the null hypothesis that the covariates for the treated observations and matched control observations balance on average. The p-values are reported in brackets.

prior to reform are all statistically different between treatment and control groups in the unmatched sample but are no longer statistically different in the matched sample. The smallest p-value among covariates in the matched sample in Table 10 is $p = 0.12$.

While I cannot conduct overall covariate balancing tests for the Mahalanobis matching models, I can show the standardized differences in covariate averages between the treatment and control observations in the matched and unmatched samples.[12,13] The results are shown in Table 11 for models estimating the effect of overall economic reform and Table 12 for models estimating the effect of labor market reform. The tables show that covariate balance is achieved for most variables in most models, however, there are some exceptions. Table 11 shows that the difference in means is larger for income per capita in all models, for manufacturing's share of state income in the 3-year entry and exit models, and for government's share of state income in the 3-year exit model. Table 12 shows that the difference in means is larger for population growth in all models, ideology in all entry and the 10-year exit models, and government's share of state income in the 10-year entry model and all exit models.

[12]The difference in means is standardized by dividing the difference in means by the square root of the unweighted average of the variance between treated and control groups.

[13]I thank an anonymous referee for the suggestion to include the covariate balancing results for the Mahalanobis models.

Table 8: Overall Covariate Balance for Labor Market Reform

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry				
PSM: Nearest Neighbor	4.51	7.23	6.43	5.78
	[0.720]	[0.405]	[0.491]	[0.566]
PSM: Nearest 2-Neighbors	1.69	4.06	4.53	1.30
	[0.975]	[0.773]	[0.717]	[0.988]
PSM: Nearest 3-Neighbors	2.15	1.29	1.65	1.36
	[0.951]	[0.989]	[0.977]	[0.987]
Exit				
PSM: Nearest Neighbor	1.65	4.73	1.13	1.74
	[0.977]	[0.692]	[0.992]	[0.973]
PSM: Nearest 2-Neighbors	0.57	3.66	0.80	0.97
	[0.999]	[0.818]	[0.997]	[0.995]
PSM: Nearest 3-Neighbors	0.43	2.30	0.50	0.62
	[1.000]	[0.941]	[0.999]	[0.999]

The table reports the χ^2 covariate balance test statistic for the null hypothesis that the covariates for the treated observations and matched control observations balance on average. The p-values are reported in brackets.

5.4 Sector-level Analysis of Entry and Exit Rates

The estimates provided in the first three columns of Table 5 show weak evidence that the firm entry rate grows over the five to seven year period following economic reform but declines over the ten year period following reform. A sector-level analysis of firm entry following reform is presented in Appendix Tables D1 - D9 and summarized in Table 13.[14] This analysis shows that both matching algorithms predict a significant increase in firm entry rate growth for the retail sector five years following reform. The Mahalanobis matching model, which produced the only statistically significant estimates of 5-year entry rate growth shown in Table 5, also estimate positive growth in the finance, insurance, and real estate (FIRE) sector and the service sector. The propensity score matching model, which produced the only statistically significant estimate of an effect on 7-year entry rate growth, estimates positive growth in the retail and service sectors as well as staggering growth in the mining sector, which is likely due to the substantial increase in oil and gas firms in North Dakota during the early 2000s. The propensity score matching model estimates show negative and statistically significant growth in the firm entry rate for the construction and FIRE sectors ten years following reform. The Mahalanobis matching model, which produced the only statistically significant estimates of an effect on the 10-year entry growth rate, shows declining growth in the agricultural (ASSF), mining, construction, manufacturing, transportation and public utility (TPU), and FIRE sectors.

The bottom panel of Table 5 provides mixed evidence that the growth in the firm exit rate increases between three and seven years following economic reform and stronger evidence of an increase ten years fol-

[14]The design of these summary tables follows summary tables from Callais and Young (2023). I thank an anonymous referee for making this recommendation.

Table 9: Balancing Test of Individual Covariates for 3-Year Entry Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.99	5.80	-5.04***	0.000
	M	5.00	5.03	-0.13	0.893
Entry_{t-5}	U	8.64	10.15	-3.75***	0.000
	M	8.68	8.32	0.89	0.377
$\ln \text{Income Per Capita}_{t-5}$	U	10.42	10.40	0.58	0.564
	M	10.42	10.43	-0.34	0.732
$\text{Population Growth}_{t-5}$	U	0.91	1.06	-0.78	0.437
	M	0.87	0.71	0.81	0.420
Ideology_{t-5}	U	46.72	51.09	-2.21**	0.028
	M	47.31	46.14	0.40	0.692
$\%\ \text{Income Manufacturing}_{t-5}$	U	11.61	11.65	-0.05	0.963
	M	11.68	9.79	1.29	0.200
$\%\ \text{Income Government}_{t-5}$	U	13.55	14.04	-0.86	0.390
	M	13.50	14.57	-1.42	0.160

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 3-year growth of the firm entry rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

lowing reform. Table 13 and Appendix Tables D1- D9 show that both matching algorithms predict growth in the manufacturing and retail exit rates three years following reform, with the Mahalanobis matching model also predicting growth in the TPU sector exit rate. The propensity score matching model only estimates a statistically significant increase in 5-year exit rate growth for the retail and construction sectors. The Mahalanobis model estimates a similar increase for the retail sector, but also estimates an increase in exit rate growth for the construction, TPU, and service sectors. At the seven year horizon, both matching models estimate growth in the exit rate for the construction and retail sectors, with the Mahalanobis model also estimating an increase in exit rate growth for the service sector and the ASSF sector. Finally, both the propensity score matching model and the Mahalanobis matching model estimate statistically significant increases in 10-year firm exit rate growth for the construction, retail, and service sectors, with the Mahalanobis model also including the FIRE sector.

Appendix Tables D10 - D18 provide a sector-level analysis of labor market reform, the results of which are summarized in Table 14. Table 6 showed that the propensity score matching model and the Mahalanobis matching model estimated a decrease in firm entry rate growth three and five years following reform, respectively. At the three year horizon, both algorithms show statistically significant decreases in firm entry rate growth for the construction, manufacturing, retail, TPU, and service sectors. The Mahalanobis matching model estimates additional declines for the mining, and FIRE sectors. At the five year horizon, both models predict decreases in firm entry rate growth for the mining, construction, manufacturing, retail, TPU, FIRE,

Table 10: Balancing Test of Individual Covariates for 3-Year Entry Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.17	5.72	-3.25***	0.001
	M	5.17	5.17	0.01	0.992
Entry_{t-5}	U	10.42	9.42	2.87***	0.004
	M	10.42	10.73	-0.64	0.523
$\ln \text{Income Per Capita}_{t-5}$	U	10.27	10.47	-6.04***	0.000
	M	10.27	10.21	1.57	0.121
$\text{Population Growth}_{t-5}$	U	1.26	1.01	1.30	0.192
	M	1.26	0.92	1.23	0.222
Ideology_{t-5}	U	50.08	50.57	-0.23	0.815
	M	50.08	50.45	-0.14	0.891
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.40	10.46	4.59***	0.000
	M	14.40	14.05	0.27	0.788
$\%\ \text{Income Government}_{t-5}$	U	14.00	13.76	0.39	0.693
	M	14.00	14.41	-0.67	0.505

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 3-year growth of the firm entry rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

and service sectors. The propensity score matching model estimates no statistically significant decreases in 7-year firm entry rate growth and one instance of a statistically significant decline in the 10-year firm entry growth rate for the retail sector. The Mahalanobis model estimates a decreasing firm entry growth rate for the construction, retail, and service industries over the seven year horizon and the retail and service industries over the ten year horizon. Conversely, both matching models estimates increases in seven and ten year firm entry rate growth for the wholesale industry.

Finally, growth in firm exit rates at the sector level are generally statistically insignificant and mixed with respect to sign, just like the results observed in Table 6. In fact, only one sector-level estimate is statistically significant across the seven or ten year horizons. However, the propensity score matching model predicts a significant increase in exit rate growth for the construction industry and the Mahalanobis matching model predicts significant increases in the construction, wholesale, TPU, and FIRE industries three years following labor market reform. The Mahalanobis matching model estimates statistically significant increases in exit rate growth for the construction, manufacturing, wholesale, and retail sectors five years following reform and the propensity score matching model estimates significant increases in exit rate growth for the construction industry.

Table 11: Covariate Balance From Mahalanobis Matching for Overall Economic Reform

		Entry				Exit			
		Standardized Differences				Standardized Differences			
Variable	U/M	3-Year	5-year	7-year	10-year	3-Year	5-year	7-year	10-year
EFNA_{t-5}	U	-0.90	-1.08	-1.16	-1.10	-0.90	-1.08	-1.16	-1.10
	M	-0.32	-0.28	-0.12	-0.19	-0.29	-0.37	-0.36	-0.31
Entry/Exit_{t-5}	U	-0.70	-0.57	-0.50	-0.63	-0.26	-0.38	-0.73	-0.86
	M	-0.23	-0.42	-0.30	-0.35	0.04	-0.08	-0.31	-0.37
$\ln \text{Income Per Capita}_{t-5}$	U	0.11	-0.08	-0.09	0.11	0.11	-0.08	-0.09	0.11
	M	0.19	0.36	0.50	0.49	0.11	0.15	0.16	0.18
$\text{Population Growth}_{t-5}$	U	-0.14	-0.16	-0.23	-0.28	-0.14	-0.16	-0.23	-0.28
	M	0.04	0.01	0.05	0.06	0.01	0.05	0.07	0.06
Ideology_{t-5}	U	-0.34	-0.32	-0.20	-0.19	-0.34	-0.32	-0.20	-0.19
	M	-0.06	-0.02	-0.11	-0.04	-0.09	-0.09	-0.17	-0.16
$\%\ \text{Income Manufacturing}_{t-5}$	U	-0.01	0.19	0.28	0.18	-0.01	0.19	0.28	0.18
	M	-0.06	-0.10	-0.12	-0.13	-0.09	-0.02	-0.02	-0.01
$\%\ \text{Income Government}_{t-5}$	U	-0.16	-0.21	-0.18	-0.22	-0.16	-0.21	-0.18	-0.22
	M	0.09	0.10	0.05	0.08	0.18	0.12	0.11	0.06

The results show the standardized differences in covariate averages between treatment and control units in the unmatched and match samples used to calculate the Mahalanobis matching estimates reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. For the Entry columns, Entry/Exit refers to entry rates, while for the Exit columns, Entry/Exit refers to exit rates.

6 Discussion

We should be cautious in our interpretation of the results presented in Table 5. While the results show some evidence of firm entry rate growth relative to the counterfactual five years following reform, the sector-level results summarized in Table 13 show that this growth is primarily limited to the retail sector and, to a limited extent, the FIRE and service sectors. The estimates of positive growth in the firm exit rate relative to the counterfactual are consistent with the Schumpeterian hypothesis from Campbell et al. (2007). However, these results are only robust across all matching algorithms ten years following reform.

One possible explanation for the decline in firm entry rate growth ten years following reform is that the number of new firms in proportion to incumbent firms declines following reform. However, another possibility, as suggested by Shakya and Plemmons (2021), is that the negative correlation between the firm entry rate and economic reform exists because more incumbent firms are surviving past their first year. However, if the firm entry rate experiences negative growth because more firms are surviving, we would not expect an increase in the firm exit rate, which is what appears to occur over the same time horizon following economic reform.

Table A1 in the appendix shows the 10-year change in the number of firm births, deaths, and incumbent firms following episodes of economic reform. While the number of incumbent firms is higher ten years following reform in nearly all instances, the number of firm births is lower in all but five. Additionally, the number of firm deaths is higher ten years following reform in all but seven instances. Interestingly, fourteen

Table 12: Covariate Balance From Mahalanobis Matching for Labor Market Reform

		Entry				Exit			
		Standardized Differences				Standardized Differences			
Variable	U/M	3-Year	5-year	7-year	10-year	3-Year	5-year	7-year	10-year
Entry									
EFNA_{t-5}	U	-0.54	-0.52	-0.52	-0.40	-0.54	-0.52	-0.52	-0.40
	M	-0.04	0.04	0.03	0.04	-0.19	-0.13	-0.14	-0.12
Entry/Exit_{t-5}	U	0.42	0.46	0.42	0.36	0.42	0.41	0.50	0.40
	M	-0.04	-0.03	-0.04	-0.02	0.21	0.16	0.22	0.19
$\ln \text{Income Per Capita}_{t-5}$	U	-1.16	-1.20	-1.19	-0.98	-1.16	-1.20	-1.19	-0.98
	M	0.00	0.04	-0.01	0.01	-0.34	-0.27	-0.27	-0.19
$\text{Population Growth}_{t-5}$	U	0.20	0.18	0.13	0.11	0.20	0.18	0.13	0.11
	M	0.21	0.21	0.18	0.17	0.19	0.17	0.20	0.20
Ideology_{t-5}	U	-0.04	0.03	0.07	0.04	-0.04	0.03	0.07	0.04
	M	-0.13	-0.15	-0.14	-0.13	0.00	-0.03	-0.05	-0.14
$\%\ \text{Income Manufacturing}_{t-5}$	U	0.66	0.66	0.64	0.51	0.66	0.66	0.64	0.51
	M	-0.01	0.01	0.01	0.03	0.13	0.10	0.11	0.04
$\%\ \text{Income Government}_{t-5}$	U	0.07	0.07	0.04	0.00	0.07	0.07	0.04	0.00
	M	0.04	-0.05	-0.04	-0.07	0.24	0.10	0.11	0.12

The results show the standardized differences in covariate averages between treatment and control units in the unmatched and match samples used to calculate the Mahalanobis matching estimates reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. For the Entry columns, Entry/Exit refers to entry rates, while for the Exit columns, Entry/Exit refers to exit rates.

of these instances of economic reform occur between the years 1997 and 2000, meaning that for these states, the ten year period following reform occurs during or immediately following the 2007-2009 recession and global financial crisis. The fact that the construction and FIRE industries suffer some of the largest 10-year decreases in firm entry rate growth and 10-year increases in firm exit rate growth lends credence to the likelihood of this event impacting the results.

However, an obvious question to ask is why these estimates are significantly different from the counterfactual in which reform did not occur, particularly for exit rates, in which all matching models estimate a positive and statistically significant difference. Exit rate growth could be higher because the post-reform environment is one in which inefficient firms are more likely to fail, which, again, is consistent with the Schumpeterian hypothesis posed by Campbell et al. (2007).

While the estimated effect of overall economic reform on the firm entry rate were mixed, the impact of labor market reform was not. The sector-level analysis summarized in Table 14 shows declining growth in the firm entry rate for a broad set of sectors, particularly in the short-run. A scenario in which firm entry rate growth declines following labor market reform could be the result of what Shapiro and Yurukoglu (2024) call "competition-in-action," in which more efficient firms grow larger, but still deliver value and cost-savings to customers. In this more sanguine scenario, larger firms are able to take advantage of labor market reforms more quickly and the effects of reform are harder to see in aggregate firm entry and exit data. Similarly, a story in which economic reform leads to declining firm entry and rising firm exits is still consist with job and

establishment growth, as found by Barnatchez and Lester (2017). However, the results I find imply that this growth primarily occurs in incumbent firms.

7 Conclusion

I examine the impact of economic reform and labor market reform on firm entry and exit at the state level. Economic reform and labor market reform are identified as large sustained increases in a state's overall economic freedom score and labor market freedom score, respectively, from the EFNA Index. I then use propensity score and Mahalanobis matching models to test the effect of reform on firm entry and exit rates. General economic reform appears to have the largest and most consistent effect over the long-run, with growth in the firm entry rate lower than the counterfactual ten years following reform and growth in the firm exit rate higher than the counterfactual ten years following reform. Labor market reform has a large negative impact on firm entry in the short-run, but the effect becomes smaller and less consistent over the long-run. Conversely, there is little evidence that labor market reform affects growth in the firm exit rate. To the extent that the type of economic reform captured by the EFNA Index improves business dynamism, these results, when coupled with existing research, imply that increased dynamism occurs within incumbent firms. Future research should explore the impact of economic reforms on different measures of business dynamism, particularly dynamism at the establishment level.

Table 13: Summary of Statistically Significant Changes in Firm Entry and Exit Rate Growth Following Economic Reform

	Entry Rate Growth							
Sector	3-Year	Algorithm	5-Year	Algorithm	7-Year	Algorithm	10-Year	Algorithm
ASFF	2/6 (-)	Mal.-NN1,2	1/6 (-)	Mal.-NN3	0/6		2/6 (-)	Mal.-NN2,3
Mining	2/6 (+)	PSM-NN1,2	0/6		3/6 (+)	PSM-All	3/6 (-)	Mal.-All
Construction	0/6		0/6		0/6		5/6 (-)	PSM-NN1,3 Mal.-All
Manufacturing	0/6		0/6		0/6		3/6 (-)	Mal.-All
Wholesale	0/6		0/6		1/6 (+)	Mal.-NN	0/6	
Retail	0/6		5/6 (+)	PSM-NN2,3 Mal.-All	3/6 (+)	PSM-All	2/6 (-)	Mal.-NN2,3
TPU	0/6		0/6		1/6 (+)	Mal.-NN1	2/6 (-)	Mal.-NN2,3
FIRE	3/6 (+)	Mal.-All	3/6 (+)	Mal.-All	0/6		3/6 (-)	PSM-NN1 Mal.-NN2,3
Services	0/6		3/6 (+)	Mal.-All	3/6 (+)	PSM-NN3 Mal.-NN1,2	0/6	
	Exit Rate Growth							
Sector	3-Year	Algorithm	5-Year	Algorithm	7-Year	Algorithm	10-Year	Algorithm
ASSF	3/6 (-)	Mal.-All	0/6		1/6 (+)	Mal.-NN2	0/6	
Mining	0/6		0/6		1/6 (-)	Mal.-NN2	0/6	
Construction	5/6 (+)	PSM-All Mal.-NN2,3	4/6 (+)	PSM-NN3 Mal.-All	6/6 (+)	All	6/6 (+)	All
Manufacturing	3/6 (+)	PSM-NN2,3 Mal.-NN3	0/6		0/6		0/6	
Wholesale	0/6		1/6 (+)	Mal.-NN3	0/6		0/6	
Retail	6/6 (+)	All	5/6 (+)	PSM-NN2,3 Mal.-All	6/6 (+)	All	5/6 (+)	PSM-All Mal-NN2,3
TPU	2/6 (+)	Mal.-NN2,3	2/6 (+)	Mal.-NN1,2	0/6		0/6	
FIRE	0/6		0/6		1/6 (+)	PSM-NN3	2/6 (+)	Mal.-NN2
Services	0/6		3/6 (+)	Mal.-All	3/6 (+)	PSM-NN3 Mal.-NN2,3	5/6 (+)	PSM-All Mal.-NN2,3

This table summarizes the results for each industrial sector following an episode of economic reform. X/6 denotes the number of estimates out of the six matching algorithms that are statistically significant at the 0.05 or 0.01 level and (-/+) denotes the sign on those estimates. The Algorithm column provides the matching algorithms that produced the statistically significant results, where PSM-NN denotes propensity score matching and the corresponding number of neighbors and Mal.-NN denotes Malhalanobis matching and the corresponding number of neighbors.

Table 14: Summary of Statistically Significant Changes in Firm Entry and Exit Rate Growth Following Labor Market Reform

	Entry Rate Growth							
Sector	3-Year	Algorithm	5-Year	Algorithm	7-Year	Algorithm	10-Year	Algorithm
ASFF	0/6		0/6		0/6		0/6	
Mining	2/6 (-)	Mal.-NN2,3	5/6 (-)	PSM-NN1,3 Mal.-All	0/6		1/6 (-)	Mal.-NN1
Construction	6/6 (-)	All	6/6 (-)	All	3/6 (-)	Mal.-All	0/6	
Manufacturing	4/6 (-)	PSM-NN1,3 Mal.-NN2,3	4/6 (-)	PSM-NN3 Mal.-All	0/6		0/6	
Wholesale	0/6		0/6		3/6 (+)	PSM-NN2,3 Mal.-NN1	6/6 (+)	All
Retail	6/6 (-)	All	6/6 (-)	All	2/6 (-)	Mal.-NN2,3	4/6 (-)	PSM-NN2 Mal.-All
TPU	4/6 (-)	PSM-NN2,3 Mal.-NN2,3	4/6 (-)	PSM-NN3 Mal.-All	0/6		0/6	
FIRE	2/6 (-)	Mal.-NN2,3	4/6 (-)	PSM-NN3 Mal.-All	0/6		0/6	
Services	6/6 (-)	All	6/6 (-)	All	2/6 (-)	Mal.-NN2,3	2/6 (-)	Mal.-NN2,3
	Exit Rate Growth							
Sector	3-Year	Algorithm	5-Year	Algorithm	7-Year	Algorithm	10-Year	Algorithm
ASSF	0/6		0/6		0/6		0/6	
Mining	1/6 (+)	Mal.NN1	0/6		0/6		0/6	
Construction	5/6 (+)	PSM-NN2,3 Mal.-All	5/6 (+)	PSM-NN2,3 Mal.-All	0/6		0/6	
Manufacturing	1/6 (+)	Mal.-NN2	3/6 (+)	Mal.-All	0/6		0/6	
Wholesale	3/6 (+)	PSM-NN3 Mal.-NN2,3	3/6 (+)	Mal.-All	0/6		0/6	
Retail	0/6		0/6		0/6		0/6	
TPU	3/6 (+)	Mal.-All	0/6		0/6		0/6	
FIRE	3/6 (+)	Mal.-All	0/6		1/6 (-)	Mal.-NN1	0/6	
Services	0/6		2/6 (-)	Mal.-NN1,3	0/6		0/6	

This table summarizes the results for each industrial sector following an episode of labor market reform. X/6 denotes the number of estimates out of the six matching algorithms that are statistically significant at the 0.05 or 0.01 level and (-/+) denotes the sign on those estimates. The Algorithm column provides the matching algorithms that produced the statistically significant results, where PSM-NN denotes propensity score matching and the corresponding number of neighbors and Mal.-NN denotes Malhalanobis matching and the corresponding number of neighbors.

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Appendix

A Absolute change is Firm Births, Deaths, and Incumbents in Reform States

Table A1: Ten Year Change in Births, Deaths, and Incumbent Firms In Reform States

State	Year	Δ_{10} Births	Δ_{10} Deaths	Δ_{10} Incumbents
Arizona	1997	1836	3475	20717
Colorado	1998	-1052	3260	17250
Connecticut	2000	-773	-151	-4667
Delaware	1986	70	196	3524
Hawaii	2000	-331	228	1365
Illinois	1988	-2179	-174	24546
Iowa	1998	-769	-14	-1028
Maryland	1986	-521	1260	14796
Massachusetts	1986	-3223	-1318	4595
Massachusetts	1998	-3505	1296	2551
Michigan	1987	-1124	597	23376
Minnesota	1998	-1554	1905	7032
Montana	2000	-319	280	2851
Nevada	1998	-20	2552	11264
New Hampshire	1997	-334	530	2061
New Jersey	1998	-2623	3876	5454
North Dakota	2002	571	245	1975
Ohio	1998	-3836	1493	-10801
Oklahoma	2000	-579	-196	2946
Pennsylvania	1988	-4991	-1199	10800
West Virginia	1998	-776	-148	-2118
Wisconsin	1998	-1571	1153	315
Wyoming	1997	81	205	2517

Year is the year in which an economic reform occurred. Δ_{10} Births is the 10-year difference in the number of age 0 firms relative to the year of reform. Δ_{10} Deaths is the 10-year difference in the number of firm deaths relative to the year of reform. Δ_{10} Incumbents is the 10-year difference in the number of incumbent firms relative to the year of reform.

B Government Spending and Taxation Reform Estimates

Table B1: Episodes of Government Spending Reform

State	Year	Increase	State	Year	Increase
Alaska	2008	1.85	Michigan	2015	2.50
Arizona	1998	1.74	Minnesota	2015	2.10
Colorado	2015	1.87	Montana	2000	1.79
Connecticut	1999	2.20	Nevada	1998	1.99
Delaware	1986	1.81	Ohio	2015	1.83
Florida	2015	1.80	Pennsylvania	1998	1.86
Georgia	2015	1.91	Pennsylvania	2015	1.76
Hawaii	2001	1.90	Rhode Island	1997	1.92
Idaho	2014	1.85	South Carolina	2015	2.39
Kentucky	1986	1.80	South Dakota	1986	1.71
Maine	2015	1.87	Utah	2015	2.20
Massachusetts	1996	1.82	Vermont	1987	2.23
Michigan	1996	1.84	Washington	2015	2.74
Wisconsin	2014	2.21	Wyoming	1997	1.83

A government spending reform is determined based on the criteria described in Section 3.2. The calculation of the change in the government spending score used to evaluate the existence of a government spending reform is based on the description provided in Section 3.2. The five-year change in a state's government spending score must equal or exceed 1, which is the standard deviation of the government spending score over the sample period.

Table B2: Episodes of Taxation Reform

State	Year	Increase	State	Year	Increase
Alaska	1998	1.77	New Hampshire	1998	1.43
Arizona	1997	1.08	North Dakota	1993	1.64
Connecticut	2002	1.11	Ohio	2011	1.02
Delaware	2000	1.04	Oregon	1992	1.06
Florida	2011	1.01	Tennessee	1998	1.39
Iowa	1998	1.11	West Virginia	1987	1.02
Michigan	1998	1.05	West Virginia	2010	1.46
Wyoming	2013	1.49			

A taxation reform is determined based on the criteria described in Section 3.2. The calculation of the change in the taxation score used to evaluate the existence of a taxation reform is based on the description provided in Section 3.2. The five-year change in a state's taxation score must equal or exceed 1.7, which is the standard deviation of the taxation score over the sample period.

Table B3: Logit Results From Entry and Exit Rate Matching Models For Government Spending and Taxation Reform

	Government Spending		Taxation	
	Entry	Exit	Entry	Exit
Overall Freedom$_{t-5}$	-1.4836***	-1.2852***	-0.7821**	-0.8916***
Entry$_{t-5}$	-0.5174***	–	0.0189	–
Exit$_{t-5}$	–	-0.0896	–	-0.1330
ln Real Income Per Capita$_{t-5}$	-1.1536	0.0017	1.1362	0.5047
Population Growth$_{t-5}$	0.4967**	0.1740	-0.1424	-0.1523
Manufacturing Share of Income (%)$_{t-5}$	-0.0914*	-0.1197**	0.0111	-0.0037
Gov't Share of Income (%)$_{t-5}$	-0.1334	-0.1863**	-0.0038	-0.0159
Government Ideology$_{t-5}$	-0.0524***	-0.0480***	-0.0423*	-0.0465*
Constant	25.7764*	9.9780	-10.0878	-0.9797
Observations	1,175	1,175	1,185	1,038
Pseudo R^2	0.21	0.14	0.06	0.08

* $p < .10$, ** $p < .05$, *** $p < .01$. The dependent variable in all regressions is a dummy variable equal to one if the state experiences sustained reforms as described in Section 3.2 and zero otherwise. The coefficient estimates are from the logit regression results from the propensity score matching model using the three year growth rate in either the firm entry rate (columns 1 and 3) or the firm exit rate (columns 2 and 4). All covariates are lagged by five years. The logit model was estimated using the Stata command `psmatch2`. Full results available upon request.

Table B4: Effect of Government Spending Reform on Firm Dynamism

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	2.686	1.014	4.250	-4.968
	(4.646)	(6.993)	(7.374)	(5.777)
PSM: Nearest 2-Neighbors	2.056	5.531	3.352	-5.802
	(4.150)	(6.354)	(6.884)	(5.125)
PSM: Nearest 3-Neighbors	2.314	4.393	3.683	-6.925
	(4.032)	(5.763)	(6.181)	(4.775)
Mahalanobis: Nearest Neighbor	1.160	3.013	2.259	-8.958*
	(3.424)	(4.178)	(4.309)	(5.391)
Mahalanobis: Nearest 2-Neighbors	0.715	0.516	3.892	-10.054**
	(3.468)	(3.714)	(5.328)	(4.126)
Mahalanobis: Nearest 3-Neighbors	0.967	2.161	3.697	-6.572
	(3.347)	(3.851)	(5.199)	(4.221)
Exit Rate Growth				
PSM: Nearest Neighbor	1.003	2.229	9.920	11.232*
	(3.340)	(5.340)	(6.591)	(6.468)
PSM: Nearest 2-Neighbors	1.670	2.748	8.367	10.523*
	(3.055)	(4.563)	(5.908)	(6.066)
PSM: Nearest 3-Neighbors	1.610	2.517	8.853	8.643
	(2.715)	(4.132)	(5.795)	(5.810)
Mahalanobis: Nearest Neighbor	1.424	2.168	5.457	9.411**
	(3.517)	(3.229)	(3.670)	(4.734)
Mahalanobis: Nearest 2-Neighbors	4.074	4.435	7.614*	13.904***
	(2.942)	(3.643)	(3.958)	(4.469)
Mahalanobis: Nearest 3-Neighbors	3.585	2.580	6.818	13.726***
	(2.397)	(3.150)	(4.204)	(4.438)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an episode of government spending reform. The bottom panel presents estimates of the growth in the firm exit rate following an episode of government spending reform. All estimates are in percentage points. Propensity score matching: all treated observations lie in the region of common support except for South Carolina in the 3-year entry rate matching model and Montana (2000) in the 5-year, 7-year, and 10-year exit rate matching models; standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: all treated observations are used; estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table B5: Effect of Taxation Reform on Firm Dynamism

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	3.344	6.806	5.031	-2.912
	(5.496)	(7.150)	(7.262)	(7.088)
PSM: Nearest 2-Neighbors	3.544	7.956	4.042	-1.977
	(4.624)	(6.095)	(6.508)	(6.301)
PSM: Nearest 3-Neighbors	1.886	9.283	4.705	-4.396
	(4.234)	(5.679)	(6.345)	(6.199)
Mahalanobis: Nearest Neighbor	4.290	5.501	4.593	-1.417
	(3.616)	(4.707)	(5.528)	(5.746)
Mahalanobis: Nearest 2-Neighbors	0.408	6.236	1.907	-0.552
	(3.165)	(5.023)	(5.225)	(4.575)
Mahalanobis: Nearest 3-Neighbors	-0.647	2.939	2.614	-0.614
	(2.622)	(4.367)	(4.894)	(3.675)
Exit Rate Growth				
PSM: Nearest Neighbor	2.725	8.688	9.975	7.336
	(4.529)	(5.478)	(6.130)	(7.904)
PSM: Nearest 2-Neighbors	3.552	8.157	9.311*	10.892
	(3.957)	(5.088)	(5.404)	(7.303)
PSM: Nearest 3-Neighbors	2.282	7.631*	10.125**	11.066*
	(3.501)	(4.506)	(4.751)	(6.437)
Mahalanobis: Nearest Neighbor	5.764	9.892**	7.012*	4.430
	(4.005)	(4.017)	(4.252)	(7.626)
Mahalanobis: Nearest 2-Neighbors	8.215***	7.307*	7.699*	4.751
	(2.838)	(3.752)	(3.993)	(6.020)
Mahalanobis: Nearest 3-Neighbors	7.775***	5.953**	7.032**	6.625
	(2.488)	(2.876)	(2.807)	(5.676)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an episode of taxation reform. The bottom panel presents estimates of the growth in the firm exit rate following an episode of taxation reform. All estimates are in percentage points. Propensity score matching: all treated observations lie in the region of common support except for Alaska (1998) in the 10-year exit rate matching model; standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: all treated observations are used; estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

C Additional Balancing Test Results

Table C1: Balancing Test of Individual Covariates for 5-Year Entry Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.83	5.81	-5.26***	0.000
	M	4.86	4.72	0.56	0.581
Entry_{t-5}	U	9.11	10.30	-2.64***	0.008
	M	9.21	8.95	0.49	0.629
$\ln \text{Income Per Capita}_{t-5}$	U	10.37	10.39	-0.36	0.717
	M	10.37	10.42	-0.87	0.389
$\text{Population Growth}_{t-5}$	U	0.89	1.07	-0.81	0.419
	M	0.84	0.74	0.35	0.727
Ideology_{t-5}	U	47.06	51.07	-1.79*	0.075
	M	48.21	51.54	-1.07	0.291
$\%\ \text{Income Manufacturing}_{t-5}$	U	13.09	11.90	1.14	0.256
	M	12.94	13.88	-0.51	0.613
$\%\ \text{Income Government}_{t-5}$	U	13.36	14.04	-1.01	0.315
	M	13.35	13.25	0.11	0.911

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 5-year growth of the firm entry rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C2: Balancing Test of Individual Covariates for 7-Year Entry Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.75	5.81	-5.15***	0.000
	M	4.79	4.65	0.58	0.565
Entry_{t-5}	U	9.55	10.52	-2.01**	0.044
	M	9.59	9.87	-0.60	0.549
$\ln \text{Income Per Capita}_{t-5}$	U	10.35	10.37	-0.39	0.699
	M	10.35	10.35	0.09	0.931
$\text{Population Growth}_{t-5}$	U	0.82	1.08	-1.03	0.302
	M	0.83	0.39	1.67	0.102
Ideology_{t-5}	U	48.39	50.78	-0.98	0.328
	M	48.80	49.62	-0.24	0.808
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.09	12.26	1.59	0.113
	M	13.76	15.07	-0.59	0.557
$\%\ \text{Income Government}_{t-5}$	U	13.46	14.06	-0.81	0.418
	M	13.54	12.96	0.75	0.456

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 7-year growth of the firm entry rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C3: Balancing Test of Individual Covariates for 10-Year Entry Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.75	5.74	-4.91***	0.000
	M	4.79	4.57	0.74	0.461
Entry_{t-5}	U	9.55	10.77	-2.51**	0.012
	M	9.59	10.23	-1.16	0.254
$\ln \text{Income Per Capita}_{t-5}$	U	10.35	10.33	0.46	0.647
	M	10.35	10.36	-0.14	0.891
$\text{Population Growth}_{t-5}$	U	0.82	1.14	-1.25	0.212
	M	0.83	0.79	0.14	0.892
Ideology_{t-5}	U	48.39	50.63	-0.92	0.358
	M	48.80	48.69	0.03	0.974
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.09	12.90	1.02	0.307
	M	13.76	12.89	0.39	0.696
$\%\ \text{Income Government}_{t-5}$	U	13.46	14.19	-0.96	0.336
	M	13.54	14.53	-0.74	0.464

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 10-year growth of the firm entry rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C4: Balancing Test of Individual Covariates for 3-Year Exit Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.99	5.80	-5.04***	0.000
	M	5.04	4.84	0.90	0.371
Exit_{t-5}	U	8.59	8.96	-1.52	0.129
	M	8.65	8.69	-0.13	0.896
$\ln \text{Income Per Capita}_{t-5}$	U	10.42	10.40	0.58	0.564
	M	10.43	10.38	1.07	0.287
$\text{Population Growth}_{t-5}$	U	0.91	1.06	-0.78	0.437
	M	0.90	0.83	0.23	0.820
Ideology_{t-5}	U	46.72	51.09	-2.21**	0.028
	M	47.34	50.02	-0.91	0.367
$\%\ \text{Income Manufacturing}_{t-5}$	U	11.61	11.65	-0.05	0.963
	M	11.53	13.56	-1.29	0.202
$\%\ \text{Income Government}_{t-5}$	U	13.55	14.04	-0.86	0.390
	M	13.53	13.40	0.16	0.875

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 3-year growth of the firm exit rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C5: Balancing Test of Individual Covariates for 5-Year Exit Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.83	5.81	-5.26***	0.000
	M	4.88	4.79	0.35	0.727
Exit_{t-5}	U	8.49	9.03	-1.91*	0.057
	M	8.57	8.59	-0.06	0.953
$\ln \text{Income Per Capita}_{t-5}$	U	10.37	10.39	-0.36	0.717
	M	10.38	10.40	-0.33	0.746
$\text{Population Growth}_{t-5}$	U	0.89	1.07	-0.81	0.419
	M	0.87	0.74	0.41	0.683
Ideology_{t-5}	U	47.06	51.07	-1.79*	0.075
	M	47.94	48.55	-0.16	0.873
$\%\ \text{Income Manufacturing}_{t-5}$	U	13.09	11.90	1.14	0.256
	M	13.09	12.58	0.26	0.800
$\%\ \text{Income Government}_{t-5}$	U	13.36	14.04	-1.01	0.315
	M	13.33	13.67	-0.36	0.719

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 5-year growth of the firm exit rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C6: Balancing Test of Individual Covariates for 7-Year Exit Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.75	5.81	-5.15***	0.000
	M	5.01	5.43	-1.29	0.206
Exit_{t-5}	U	8.13	9.07	-2.99***	0.003
	M	8.54	8.39	0.46	0.651
$\ln \text{Income Per Capita}_{t-5}$	U	10.35	10.37	-0.39	0.699
	M	10.39	10.32	1.01	0.319
$\text{Population Growth}_{t-5}$	U	0.82	1.08	-1.03	0.302
	M	0.85	0.82	0.10	0.924
Ideology_{t-5}	U	48.39	50.78	-0.98	0.328
	M	49.85	45.09	1.25	0.222
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.09	12.26	1.59	0.113
	M	13.22	15.31	-0.81	0.425
$\%\ \text{Income Government}_{t-5}$	U	13.46	14.06	-0.81	0.418
	M	13.81	12.65	1.13	0.269

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 7-year growth of the firm exit rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C7: Balancing Test of Individual Covariates for 10-Year Exit Estimates Following Overall Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	4.75	5.74	-4.91***	0.000
	M	4.95	4.95	0.02	0.981
Exit_{t-5}	U	8.13	9.24	-3.48***	0.001
	M	8.39	8.21	0.59	0.558
$\ln \text{Income Per Capita}_{t-5}$	U	10.35	10.33	0.46	0.647
	M	10.37	10.42	-0.81	0.425
$\text{Population Growth}_{t-5}$	U	0.82	1.14	-1.25	0.212
	M	0.78	0.50	0.80	0.427
Ideology_{t-5}	U	48.39	50.63	-0.92	0.358
	M	49.11	50.71	-0.44	0.666
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.09	12.90	1.02	0.307
	M	13.79	11.63	0.96	0.343
$\%\ \text{Income Government}_{t-5}$	U	13.46	14.19	-0.96	0.336
	M	13.57	13.30	0.30	0.766

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 10-year growth of the firm exit rate reported in Table 5. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C8: Balancing Test of Individual Covariates for 5-Year Entry Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.20	5.73	-3.01***	0.003
	M	5.20	5.22	-0.10	0.918
Entry_{t-5}	U	10.68	9.64	3.00***	0.003
	M	10.68	10.43	0.52	0.606
$\ln \text{Income Per Capita}_{t-5}$	U	10.25	10.46	-5.90***	0.000
	M	10.25	10.20	1.41	0.163
$\text{Population Growth}_{t-5}$	U	1.27	1.03	1.17	0.243
	M	1.27	0.72	1.90*	0.061
Ideology_{t-5}	U	51.04	50.70	0.16	0.870
	M	51.04	54.47	-1.45	0.151
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.74	10.82	4.40***	0.000
	M	14.74	15.85	-0.82	0.417
$\%\ \text{Income Government}_{t-5}$	U	13.99	13.77	0.35	0.727
	M	13.99	13.59	0.69	0.492

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 5-year growth of the firm entry rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C9: Balancing Test of Individual Covariates for 7-Year Entry Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.17	5.72	-2.97***	0.003
	M	5.17	5.06	0.48	0.629
Entry_{t-5}	U	10.80	9.87	2.71***	0.007
	M	10.80	10.85	-0.11	0.914
$\ln \text{Income Per Capita}_{t-5}$	U	10.24	10.44	-5.65***	0.000
	M	10.24	10.22	0.63	0.530
$\text{Population Growth}_{t-5}$	U	1.20	1.03	0.82	0.412
	M	1.20	0.66	1.94*	0.056
Ideology_{t-5}	U	51.53	50.67	0.42	0.678
	M	51.53	52.00	-0.17	0.862
$\%\ \text{Income Manufacturing}_{t-5}$	U	15.00	11.21	4.14***	0.000
	M	15.00	16.15	-0.86	0.393
$\%\ \text{Income Government}_{t-5}$	U	13.96	13.81	0.23	0.818
	M	13.96	13.71	0.33	0.744

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 7-year growth of the firm entry rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C10: Balancing Test of Individual Covariates for 10-Year Entry Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.17	5.59	-2.30**	0.022
	M	5.17	5.07	0.41	0.681
Entry_{t-5}	U	10.80	10.00	2.28**	0.023
	M	10.80	10.99	-0.41	0.685
$\ln \text{Income Per Capita}_{t-5}$	U	10.24	10.41	-4.64***	0.000
	M	10.24	10.24	0.18	0.855
$\text{Population Growth}_{t-5}$	U	1.20	1.07	0.65	0.519
	M	1.20	0.80	1.49	0.141
Ideology_{t-5}	U	51.53	51.06	0.23	0.819
	M	51.53	50.97	0.22	0.827
$\%\ \text{Income Manufacturing}_{t-5}$	U	15.00	11.90	3.27***	0.001
	M	15.00	15.62	-0.44	0.664
$\%\ \text{Income Government}_{t-5}$	U	13.96	13.95	0.01	0.991
	M	13.96	13.45	0.81	0.422

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 10-year growth of the firm entry rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C11: Balancing Test of Individual Covariates for 3-Year Exit Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.17	5.72	-3.25***	0.001
	M	5.17	5.09	0.43	0.671
Exit_{t-5}	U	9.22	8.61	2.64***	0.008
	M	9.22	9.15	0.20	0.839
$\ln \text{Income Per Capita}_{t-5}$	U	10.27	10.47	-6.04***	0.000
	M	10.27	10.26	0.21	0.837
$\text{Population Growth}_{t-5}$	U	1.26	1.01	1.30	0.192
	M	1.26	0.96	1.14	0.256
Ideology_{t-5}	U	50.08	50.57	-0.23	0.815
	M	50.08	49.54	0.21	0.834
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.40	10.46	4.59***	0.000
	M	14.40	15.21	-0.59	0.558
$\%\ \text{Income Government}_{t-5}$	U	14.00	13.76	0.39	0.693
	M	14.00	14.01	-0.02	0.987

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 3-year growth of the firm exit rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C12: Balancing Test of Individual Covariates for 5-Year Exit Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.20	5.73	-3.01***	0.003
	M	5.20	5.04	0.71	0.480
Exit_{t-5}	U	9.26	8.67	2.45**	0.014
	M	9.26	8.96	1.01	0.316
$\ln \text{Income Per Capita}_{t-5}$	U	10.25	10.46	-5.90***	0.000
	M	10.25	10.23	0.67	0.503
$\text{Population Growth}_{t-5}$	U	1.27	1.03	1.17	0.243
	M	1.27	0.69	2.05**	0.044
Ideology_{t-5}	U	51.04	50.70	0.16	0.870
	M	51.04	51.98	-0.36	0.723
$\%\ \text{Income Manufacturing}_{t-5}$	U	14.74	10.82	4.40***	0.000
	M	14.74	15.64	-0.59	0.555
$\%\ \text{Income Government}_{t-5}$	U	13.99	13.77	0.35	0.727
	M	13.99	13.66	0.45	0.651

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 5-year growth of the firm exit rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C13: Balancing Test of Individual Covariates for 7-Year Exit Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.17	5.72	-2.97***	0.003
	M	5.17	5.04	0.60	0.549
Exit_{t-5}	U	9.34	8.64	2.86***	0.004
	M	9.34	9.30	0.12	0.901
$\ln \text{Income Per Capita}_{t-5}$	U	10.24	10.44	-5.65***	0.000
	M	10.24	10.26	-0.44	0.660
$\text{Population Growth}_{t-5}$	U	1.20	1.03	0.82	0.412
	M	1.20	1.06	0.41	0.683
Ideology_{t-5}	U	51.53	50.67	0.42	0.678
	M	51.53	51.34	0.08	0.940
$\%\ \text{Income Manufacturing}_{t-5}$	U	15.00	11.21	4.14***	0.000
	M	15.00	15.51	-0.33	0.742
$\%\ \text{Income Government}_{t-5}$	U	13.96	13.81	0.23	0.818
	M	13.96	13.54	0.57	0.571

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 7-year growth of the firm exit rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

Table C14: Balancing Test of Individual Covariates for 10-Year Exit Estimates Following Labor Market Reform

Variable	U/M	Treated	Control	t-statistic	p-value
EFNA_{t-5}	U	5.17	5.59	-2.30**	0.022
	M	5.17	5.09	0.33	0.744
Exit_{t-5}	U	9.34	8.75	2.26**	0.024
	M	9.34	9.48	-0.38	0.702
$\ln \text{Income Per Capita}_{t-5}$	U	10.24	10.41	-4.64***	0.000
	M	10.24	10.26	-0.34	0.735
$\text{Population Growth}_{t-5}$	U	1.20	1.07	0.65	0.519
	M	1.20	1.18	0.07	0.944
Ideology_{t-5}	U	51.53	51.06	0.23	0.819
	M	51.53	51.35	0.07	0.944
$\%\ \text{Income Manufacturing}_{t-5}$	U	15.00	11.90	3.27***	0.001
	M	15.00	14.88	0.08	0.933
$\%\ \text{Income Government}_{t-5}$	U	13.96	13.95	0.01	0.991
	M	13.96	13.50	0.64	0.524

* $p < .10$, ** $p < .05$, *** $p < .01$. The results are from the balancing tests for the nearest neighbor propensity score matching estimates for the 10-year growth of the firm exit rate reported in Table 6. The column U/M indicates whether statistics are from the unmatched (U) or matched (M) samples. The columns Treated and Control show the means for the treated observations and the control observations.

D Industrial Sector Results

Table D1: Effect of Economic Reform on Firm Dynamism: Agricultural Services, Forestry, and Fishing Sector

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-9.627	-6.482	-6.481	-25.81
	(12.33)	(15.29)	(15.74)	(18.79)
PSM: Nearest 2-Neighbors	-7.699	-10.73	-14.17	-18.61
	(11.69)	(13.20)	(14.17)	(16.14)
PSM: Nearest 3-Neighbors	-10.38	-11.94	-8.743	-21.07
	(10.92)	(12.19)	(12.75)	(16.15)
Mahalanobis: Nearest Neighbor	-28.21***	-19.86*	7.425	-20.27
	(9.486)	(11.41)	(13.13)	(12.77)
Mahalanobis: Nearest 2-Neighbors	-17.31**	-17.79*	-3.828	-28.43***
	(8.809)	(10.37)	(12.96)	(9.962)
Mahalanobis: Nearest 3-Neighbors	-14.09*	-18.37**	-3.813	-27.45***
	(8.251)	(8.779)	(11.47)	(9.786)
Exit Rate Growth				
PSM: Nearest Neighbor	-10.00	-5.691	8.597	6.405
	(8.699)	(12.37)	(12.04)	(13.29)
PSM: Nearest 2-Neighbors	-4.909	-9.381	14.08	7.024
	(8.005)	(11.68)	(10.66)	(11.88)
PSM: Nearest 3-Neighbors	-3.641	-6.660	18.37*	2.990
	(7.356)	(10.57)	(10.12)	(11.27)
Mahalanobis: Nearest Neighbor	-15.19**	-12.43	6.282	-18.37
	(7.295)	(8.607)	(8.438)	(15.95)
Mahalanobis: Nearest 2-Neighbors	-14.03**	-4.360	13.25**	-2.974
	(6.198)	(7.965)	(6.638)	(11.13)
Mahalanobis: Nearest 3-Neighbors	-13.72**	-3.620	14.04*	-3.466
	(5.583)	(7.643)	(7.317)	(9.845)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D2: Effect of Economic Reform on Firm Dynamism: Mining, Oil, and Gas Sector

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	30.50**	8.232	63.51**	-6.852
	(14.71)	(20.32)	(25.10)	(21.07)
PSM: Nearest 2-Neighbors	28.52**	14.36	50.07**	-5.706
	(13.64)	(18.85)	(21.33)	(17.20)
PSM: Nearest 3-Neighbors	21.77*	11.61	51.24**	-1.735
	(11.93)	(17.71)	(20.63)	(16.05)
Mahalanobis: Nearest Neighbor	1.718	15.42	-36.34*	-34.42**
	(10.47)	(13.00)	(19.64)	(13.79)
Mahalanobis: Nearest 2-Neighbors	9.573	11.11	-5.389	-29.58**
	(10.11)	(11.38)	(13.44)	(12.34)
Mahalanobis: Nearest 3-Neighbors	16.71*	8.661	-1.455	-20.99**
	(9.702)	(11.62)	(13.23)	(10.57)
Exit Rate Growth				
PSM: Nearest Neighbor	-15.13	-20.73	-19.10	7.502
	(12.88)	(17.30)	(18.49)	(20.46)
PSM: Nearest 2-Neighbors	-11.51	-2.710	-19.30	14.82
	(11.70)	(15.09)	(16.71)	(16.79)
PSM: Nearest 3-Neighbors	-12.00	-7.564	-25.06*	4.404
	(10.68)	(14.61)	(15.09)	(16.76)
Mahalanobis: Nearest Neighbor	-6.118	-3.689	-14.75	-20.07
	(14.41)	(17.04)	(12.09)	(18.13)
Mahalanobis: Nearest 2-Neighbors	-12.29	-15.58	-25.88**	-13.45
	(11.13)	(15.37)	(13.12)	(16.11)
Mahalanobis: Nearest 3-Neighbors	-10.68	-12.36	-19.88*	-9.246
	(9.805)	(13.95)	(11.22)	(12.85)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D3: Effect of Economic Reform on Firm Dynamism: Construction Sector

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-3.299	6.476	11.02	-27.54**
	(9.059)	(13.12)	(13.93)	(12.15)
PSM: Nearest 2-Neighbors	-2.027	5.976	11.70	-20.68*
	(7.939)	(12.28)	(12.23)	(10.65)
PSM: Nearest 3-Neighbors	1.903	3.637	13.79	-23.88**
	(7.433)	(10.83)	(10.76)	(9.694)
Mahalanobis: Nearest Neighbor	12.41	20.21*	0.384	-25.23**
	(9.797)	(12.21)	(10.25)	(10.35)
Mahalanobis: Nearest 2-Neighbors	9.064	11.53	-2.154	-36.96***
	(9.078)	(10.00)	(8.428)	(8.428)
Mahalanobis: Nearest 3-Neighbors	7.930	14.85	-3.386	-33.38***
	(7.957)	(9.476)	(7.236)	(8.255)
Exit Rate Growth				
PSM: Nearest Neighbor	14.16**	13.97	23.51***	40.56***
	(6.677)	(9.164)	(9.024)	(9.002)
PSM: Nearest 2-Neighbors	13.14**	13.85*	26.82***	38.77***
	(5.594)	(7.640)	(8.153)	(8.246)
PSM: Nearest 3-Neighbors	10.77**	16.35**	28.74***	40.10***
	(5.204)	(7.108)	(6.888)	(7.819)
Mahalanobis: Nearest Neighbor	9.172*	19.23***	29.05***	26.25***
	(5.098)	(5.638)	(6.513)	(7.795)
Mahalanobis: Nearest 2-Neighbors	11.86**	21.86***	30.38***	41.36***
	(4.708)	(5.487)	(6.568)	(8.125)
Mahalanobis: Nearest 3-Neighbors	11.22**	16.25***	27.55***	36.84***
	(4.352)	(5.037)	(5.474)	(7.297)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D4: Effect of Economic Reform on Firm Dynamism: Manufacturing Sector

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-3.664	-0.468	-1.058	-2.212
	(5.888)	(7.635)	(8.546)	(9.181)
PSM: Nearest 2-Neighbors	-5.232	0.682	-0.525	-7.692
	(5.453)	(6.903)	(7.904)	(8.219)
PSM: Nearest 3-Neighbors	-1.607	-1.951	-2.924	-9.902
	(4.768)	(6.841)	(7.139)	(7.268)
Mahalanobis: Nearest Neighbor	0.900	-5.069	-1.942	-16.88**
	(4.817)	(7.282)	(6.891)	(7.672)
Mahalanobis: Nearest 2-Neighbors	-0.897	-4.309	-3.170	-17.62***
	(4.330)	(5.832)	(5.537)	(6.332)
Mahalanobis: Nearest 3-Neighbors	-1.197	-2.008	-5.789	-16.92***
	(4.190)	(5.208)	(5.040)	(6.089)
Exit Rate Growth				
PSM: Nearest Neighbor	10.02*	1.673	3.546	9.625
	(5.584)	(6.244)	(6.093)	(7.506)
PSM: Nearest 2-Neighbors	11.74**	2.443	6.778	8.764
	(5.042)	(5.412)	(5.987)	(6.912)
PSM: Nearest 3-Neighbors	10.85**	4.065	7.801	10.18
	(4.823)	(4.718)	(5.515)	(6.650)
Mahalanobis: Nearest Neighbor	6.495	7.299*	5.933	-2.300
	(4.599)	(3.950)	(3.727)	(5.421)
Mahalanobis: Nearest 2-Neighbors	8.040*	5.740	6.245	4.243
	(4.500)	(4.698)	(5.045)	(6.552)
Mahalanobis: Nearest 3-Neighbors	8.135**	5.652	5.817	4.699
	(4.062)	(3.632)	(4.437)	(6.137)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D5: Effect of Economic Reform on Firm Dynamism: Wholesale Sector

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-2.963	6.178	3.828	-2.995
	(5.335)	(5.041)	(6.770)	(7.247)
PSM: Nearest 2-Neighbors	-3.274	3.158	4.576	0.219
	(4.844)	(4.530)	(6.127)	(6.341)
PSM: Nearest 3-Neighbors	-1.008	1.579	2.440	-1.574
	(4.289)	(3.969)	(5.393)	(6.000)
Mahalanobis: Nearest Neighbor	-3.460	-1.704	8.506**	2.008
	(4.246)	(3.427)	(4.321)	(4.421)
Mahalanobis: Nearest 2-Neighbors	-2.534	0.679	6.000*	-2.538
	(3.844)	(3.137)	(3.587)	(3.691)
Mahalanobis: Nearest 3-Neighbors	-3.402	0.736	0.899	-2.654
	(3.381)	(2.917)	(4.189)	(3.204)
Exit Rate Growth				
PSM: Nearest Neighbor	7.635*	1.905	-6.349	8.985
	(4.477)	(5.201)	(6.015)	(6.321)
PSM: Nearest 2-Neighbors	7.390*	1.988	-5.460	10.47*
	(3.843)	(4.834)	(5.370)	(5.860)
PSM: Nearest 3-Neighbors	5.140	3.721	-1.487	7.057
	(3.629)	(4.451)	(5.059)	(5.525)
Mahalanobis: Nearest Neighbor	-0.360	2.842	0.353	-1.015
	(3.635)	(4.229)	(4.590)	(5.341)
Mahalanobis: Nearest 2-Neighbors	4.178	6.756*	2.082	2.974
	(2.666)	(3.789)	(3.878)	(4.160)
Mahalanobis: Nearest 3-Neighbors	4.007	7.849**	-0.097	4.066
	(2.510)	(3.778)	(3.661)	(4.053)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D6: Effect of Economic Reform on Firm Dynamism: Retail Sector

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	2.633	10.51*	14.37**	-5.700
	(4.096)	(6.087)	(6.533)	(5.648)
PSM: Nearest 2-Neighbors	2.425	11.98**	11.87**	-2.221
	(3.470)	(5.537)	(5.785)	(4.780)
PSM: Nearest 3-Neighbors	3.763	12.63**	13.31**	-2.430
	(3.255)	(5.073)	(5.399)	(4.310)
Mahalanobis: Nearest Neighbor	3.970	17.19***	6.809	-9.701*
	(3.851)	(4.952)	(4.686)	(4.929)
Mahalanobis: Nearest 2-Neighbors	5.445*	14.16***	5.349	-10.16***
	(3.066)	(4.201)	(4.155)	(3.387)
Mahalanobis: Nearest 3-Neighbors	4.599*	14.68***	4.576	-7.880**
	(2.693)	(3.942)	(3.790)	(3.492)
Exit Rate Growth				
PSM: Nearest Neighbor	8.689**	7.678*	13.06**	16.16**
	(3.367)	(4.490)	(5.186)	(6.250)
PSM: Nearest 2-Neighbors	8.508***	9.018**	13.18***	14.63**
	(2.880)	(3.938)	(4.699)	(5.677)
PSM: Nearest 3-Neighbors	8.045***	10.10***	14.98***	15.24***
	(2.633)	(3.848)	(4.508)	(5.444)
Mahalanobis: Nearest Neighbor	7.268***	9.578***	10.65**	2.822
	(2.583)	(3.418)	(4.928)	(4.585)
Mahalanobis: Nearest 2-Neighbors	6.436***	12.25***	13.61***	10.97**
	(2.256)	(3.144)	(4.295)	(4.309)
Mahalanobis: Nearest 3-Neighbors	6.889***	9.462***	13.75***	11.15***
	(2.013)	(2.791)	(3.404)	(3.964)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D7: Effect of Economic Reform on Firm Dynamism: Transportation and Public Utility Sector

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-3.127	-3.772	3.340	-15.04
	(6.481)	(8.118)	(8.981)	(10.36)
PSM: Nearest 2-Neighbors	-1.958	-0.885	6.505	-6.127
	(5.973)	(7.190)	(8.096)	(9.459)
PSM: Nearest 3-Neighbors	0.849	-1.357	8.009	-7.501
	(5.697)	(7.012)	(7.190)	(9.467)
Mahalanobis: Nearest Neighbor	3.475	-7.994	12.24**	-4.956
	(5.410)	(5.592)	(6.058)	(6.156)
Mahalanobis: Nearest 2-Neighbors	2.343	-6.451*	5.202	-21.15***
	(4.734)	(3.920)	(5.601)	(7.249)
Mahalanobis: Nearest 3-Neighbors	1.678	-3.131	3.723	-17.53**
	(4.093)	(3.707)	(5.139)	(7.257)
Exit Rate Growth				
PSM: Nearest Neighbor	6.804	6.141	-2.060	10.99
	(4.923)	(6.839)	(6.774)	(8.114)
PSM: Nearest 2-Neighbors	5.718	5.465	2.040	11.96
	(4.456)	(6.101)	(5.856)	(7.344)
PSM: Nearest 3-Neighbors	5.466	10.05*	2.890	10.53
	(4.292)	(5.752)	(5.416)	(6.869)
Mahalanobis: Nearest Neighbor	7.900*	13.99**	7.930	4.321
	(4.109)	(5.706)	(5.578)	(6.767)
Mahalanobis: Nearest 2-Neighbors	8.443**	12.14**	5.058	8.278
	(3.498)	(4.739)	(4.523)	(5.881)
Mahalanobis: Nearest 3-Neighbors	7.188**	8.622*	1.765	6.558
	(3.467)	(4.492)	(4.470)	(5.534)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D8: Effect of Economic Reform on Firm Dynamism: Finance, Insurance, and Real Estate Sector

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	0.669	6.169	9.156	-20.81**
	(6.763)	(9.618)	(9.811)	(9.898)
PSM: Nearest 2-Neighbors	-0.527	10.90	10.55	-12.97
	(5.713)	(8.249)	(8.932)	(8.937)
PSM: Nearest 3-Neighbors	3.293	9.564	12.29	-11.56
	(5.362)	(7.444)	(7.954)	(8.405)
Mahalanobis: Nearest Neighbor	16.50***	23.14***	1.734	-12.38
	(6.151)	(8.292)	(5.777)	(7.848)
Mahalanobis: Nearest 2-Neighbors	12.62**	14.74**	5.107	-18.86***
	(4.999)	(6.014)	(5.267)	(6.920)
Mahalanobis: Nearest 3-Neighbors	10.11**	17.83***	4.013	-13.79**
	(4.712)	(5.874)	(5.050)	(6.581)
Exit Rate Growth				
PSM: Nearest Neighbor	4.597	5.281	7.261	14.28*
	(5.846)	(7.589)	(8.509)	(8.595)
PSM: Nearest 2-Neighbors	5.873	2.717	9.327	15.49*
	(5.033)	(6.417)	(7.238)	(8.029)
PSM: Nearest 3-Neighbors	3.775	4.461	13.63**	15.13*
	(4.556)	(5.781)	(6.798)	(7.791)
Mahalanobis: Nearest Neighbor	-2.995	-0.666	2.801	2.273
	(4.519)	(5.208)	(7.287)	(6.085)
Mahalanobis: Nearest 2-Neighbors	-0.078	5.184	8.875	12.24**
	(3.653)	(4.842)	(6.130)	(6.117)
Mahalanobis: Nearest 3-Neighbors	1.065	-0.551	8.621*	12.97**
	(3.359)	(4.630)	(4.746)	(5.569)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D9: Effect of Economic Reform on Firm Dynamism: Services Sector

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-1.792	4.926	5.753	-7.051
	(3.237)	(4.967)	(4.878)	(4.782)
PSM: Nearest 2-Neighbors	-0.547	4.396	7.961*	-4.255
	(2.764)	(4.449)	(4.399)	(4.311)
PSM: Nearest 3-Neighbors	0.855	4.523	8.727**	-3.312
	(2.681)	(3.970)	(3.777)	(4.240)
Mahalanobis: Nearest Neighbor	4.092	9.464**	7.386**	-5.326
	(2.917)	(4.633)	(3.198)	(4.324)
Mahalanobis: Nearest 2-Neighbors	4.122*	7.954**	6.417**	-6.357
	(2.433)	(3.477)	(2.862)	(4.014)
Mahalanobis: Nearest 3-Neighbors	3.795*	8.771***	4.867*	-5.438
	(2.277)	(3.392)	(2.626)	(3.715)
Exit Rate Growth				
PSM: Nearest Neighbor	0.952	3.966	5.367	8.595**
	(2.530)	(4.013)	(4.128)	(3.914)
PSM: Nearest 2-Neighbors	2.255	5.492	5.870	9.494***
	(2.403)	(3.616)	(3.708)	(3.418)
PSM: Nearest 3-Neighbors	2.712	5.574*	7.866**	9.456***
	(2.074)	(3.194)	(3.311)	(3.148)
Mahalanobis: Nearest Neighbor	0.506	6.066**	4.049	-2.187
	(2.289)	(3.005)	(2.677)	(2.252)
Mahalanobis: Nearest 2-Neighbors	2.654	8.801***	7.078***	5.411***
	(1.708)	(2.762)	(2.631)	(1.857)
Mahalanobis: Nearest 3-Neighbors	2.782*	7.429***	5.994***	5.485***
	(1.608)	(2.712)	(2.281)	(2.034)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D10: Effect of Labor Market Reform on Firm Dynamism: Agricultural Services, Forestry, and Fishing

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-0.809	-9.005	-8.410	13.639
	(12.350)	(10.986)	(13.236)	(11.247)
PSM: Nearest 2-Neighbors	-1.993	-6.195	-1.258	7.296
	(10.870)	(10.149)	(11.700)	(9.748)
PSM: Nearest 3-Neighbors	-5.859	-8.357	3.882	10.013
	(10.733)	(9.144)	(11.065)	(9.286)
Mahalanobis: Nearest Neighbor	-13.997	-7.470	7.803	7.684
	(10.346)	(9.922)	(9.968)	(8.914)
Mahalanobis: Nearest 2-Neighbors	-9.972	-9.702	6.833	3.223
	(8.755)	(8.739)	(9.625)	(8.244)
Mahalanobis: Nearest 3-Neighbors	-5.594	-9.696	7.645	3.011
	(8.101)	(7.783)	(8.701)	(7.072)
Exit Rate Growth				
PSM: Nearest Neighbor	-6.137	-0.673	-4.705	-4.411
	(8.477)	(8.898)	(9.231)	(8.792)
PSM: Nearest 2-Neighbors	-0.147	-4.603	-4.612	-2.864
	(7.225)	(7.985)	(8.530)	(7.571)
PSM: Nearest 3-Neighbors	-1.520	-2.201	-5.750	-3.866
	(6.554)	(7.638)	(8.093)	(7.356)
Mahalanobis: Nearest Neighbor	-9.464	-7.885	8.833	2.284
	(7.664)	(7.735)	(8.391)	(9.463)
Mahalanobis: Nearest 2-Neighbors	2.636	-4.415	4.444	2.988
	(6.340)	(6.596)	(7.208)	(7.368)
Mahalanobis: Nearest 3-Neighbors	0.777	-4.305	3.396	0.592
	(5.567)	(6.214)	(7.091)	(6.776)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D11: Effect of Labor Market Reform on Firm Dynamism: Mining

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-7.087	-29.170**	-3.846	-24.330
	(13.295)	(14.114)	(15.685)	(16.311)
PSM: Nearest 2-Neighbors	-11.752	-19.836	-9.330	-17.805
	(11.795)	(12.933)	(13.424)	(14.485)
PSM: Nearest 3-Neighbors	-10.760	-23.486**	-13.178	-11.753
	(10.650)	(11.684)	(13.121)	(14.162)
Mahalanobis: Nearest Neighbor	-20.914*	-30.645***	-22.366*	-23.010**
	(11.002)	(11.142)	(12.966)	(11.035)
Mahalanobis: Nearest 2-Neighbors	-21.076**	-26.658**	-25.227*	-19.253
	(8.818)	(10.721)	(12.985)	(11.835)
Mahalanobis: Nearest 3-Neighbors	-20.494**	-27.829**	-21.778*	-18.989
	(8.719)	(10.880)	(12.944)	(12.739)
Exit Rate Growth				
PSM: Nearest Neighbor	1.848	-3.102	-7.138	-22.884*
	(11.331)	(13.399)	(12.167)	(13.239)
PSM: Nearest 2-Neighbors	2.940	-9.652	-7.990	-16.773
	(9.823)	(11.897)	(11.661)	(12.102)
PSM: Nearest 3-Neighbors	2.587	-12.019	-9.098	-13.145
	(9.193)	(10.784)	(10.412)	(11.044)
Mahalanobis: Nearest Neighbor	19.485**	4.158	3.385	-16.326
	(8.360)	(8.040)	(9.739)	(10.776)
Mahalanobis: Nearest 2-Neighbors	15.191*	-1.864	0.699	-10.113
	(8.131)	(8.173)	(8.765)	(9.401)
Mahalanobis: Nearest 3-Neighbors	11.277	-3.496	0.819	-9.153
	(7.313)	(8.375)	(7.552)	(8.434)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D12: Effect of Labor Market Reform on Firm Dynamism: Construction

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-21.827**	-25.237**	-13.786	-0.649
	(8.534)	(9.856)	(10.752)	(9.120)
PSM: Nearest 2-Neighbors	-19.820***	-28.745***	-11.196	-3.948
	(7.686)	(8.802)	(9.543)	(8.372)
PSM: Nearest 3-Neighbors	-20.634***	-30.521***	-12.147	-6.616
	(7.207)	(8.459)	(8.601)	(7.847)
Mahalanobis: Nearest Neighbor	-28.554***	-42.729***	-17.659***	-13.787*
	(5.227)	(6.806)	(6.660)	(8.162)
Mahalanobis: Nearest 2-Neighbors	-27.583***	-35.200***	-15.779***	-11.192*
	(4.940)	(6.388)	(5.867)	(6.376)
Mahalanobis: Nearest 3-Neighbors	-25.777***	-33.865***	-14.800**	-9.335
	(4.885)	(6.402)	(5.765)	(5.937)
Exit Rate Growth				
PSM: Nearest Neighbor	11.759*	10.505	6.855	2.587
	(6.708)	(7.549)	(7.759)	(7.443)
PSM: Nearest 2-Neighbors	12.190**	13.974**	0.177	6.024
	(6.003)	(6.963)	(6.735)	(6.962)
PSM: Nearest 3-Neighbors	12.169**	12.670**	1.243	8.169
	(5.317)	(6.122)	(6.643)	(5.971)
Mahalanobis: Nearest Neighbor	18.014***	18.483***	0.908	5.799
	(4.399)	(5.305)	(4.780)	(6.010)
Mahalanobis: Nearest 2-Neighbors	17.088***	17.022***	2.247	6.287
	(3.864)	(4.285)	(4.419)	(4.665)
Mahalanobis: Nearest 3-Neighbors	17.966***	17.524***	4.182	4.912
	(3.603)	(3.780)	(4.148)	(4.614)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D13: Effect of Labor Market Reform on Firm Dynamism: Manufacturing

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-10.993**	-9.141*	-6.013	-0.507
	(5.128)	(5.128)	(5.511)	(5.606)
PSM: Nearest 2-Neighbors	-8.518*	-8.676*	-2.534	-2.535
	(4.432)	(4.464)	(4.932)	(5.023)
PSM: Nearest 3-Neighbors	-9.053**	-9.510**	-2.259	-2.754
	(4.094)	(4.101)	(4.426)	(4.518)
Mahalanobis: Nearest Neighbor	-5.079	-13.364***	-0.850	1.173
	(4.278)	(3.999)	(5.045)	(4.811)
Mahalanobis: Nearest 2-Neighbors	-9.636***	-14.135***	-4.748	-0.638
	(3.074)	(3.449)	(3.852)	(3.717)
Mahalanobis: Nearest 3-Neighbors	-9.681***	-14.741***	-5.987*	0.105
	(3.035)	(3.111)	(3.487)	(3.466)
Exit Rate Growth				
PSM: Nearest Neighbor	3.941	0.894	0.653	-8.618*
	(4.995)	(4.529)	(4.742)	(5.177)
PSM: Nearest 2-Neighbors	3.409	5.037	-3.712	-5.238
	(4.248)	(4.010)	(4.257)	(4.693)
PSM: Nearest 3-Neighbors	4.272	5.030	-2.834	-5.284
	(3.944)	(3.829)	(3.867)	(4.252)
Mahalanobis: Nearest Neighbor	1.699	6.738**	-2.681	-5.099
	(3.592)	(3.237)	(3.047)	(4.447)
Mahalanobis: Nearest 2-Neighbors	7.234**	8.462***	-1.097	-1.940
	(3.657)	(3.001)	(2.756)	(3.994)
Mahalanobis: Nearest 3-Neighbors	7.231*	7.799***	-2.037	-3.124
	(3.861)	(2.962)	(2.763)	(3.793)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D14: Effect of Labor Market Reform on Firm Dynamism: Wholesale

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-3.395	-0.848	9.391*	10.783**
	(4.149)	(4.182)	(5.067)	(5.051)
PSM: Nearest 2-Neighbors	-0.576	1.637	9.422**	11.760***
	(3.697)	(3.862)	(4.466)	(4.361)
PSM: Nearest 3-Neighbors	-2.073	0.834	9.843**	11.534***
	(3.466)	(3.460)	(4.274)	(4.051)
Mahalanobis: Nearest Neighbor	-0.166	1.160	10.233***	9.793***
	(2.815)	(2.843)	(3.910)	(3.777)
Mahalanobis: Nearest 2-Neighbors	-3.320	0.945	6.404*	9.308***
	(2.472)	(3.301)	(3.452)	(3.387)
Mahalanobis: Nearest 3-Neighbors	-4.121*	0.705	5.868*	9.355***
	(2.396)	(2.812)	(3.354)	(3.184)
Exit Rate Growth				
PSM: Nearest Neighbor	6.247	3.589	-6.676	-0.286
	(4.282)	(4.653)	(5.462)	(4.545)
PSM: Nearest 2-Neighbors	6.634*	6.728*	-6.364	0.291
	(3.595)	(4.012)	(4.524)	(3.907)
PSM: Nearest 3-Neighbors	6.838**	5.268	-5.700	1.088
	(3.410)	(3.500)	(4.402)	(3.543)
Mahalanobis: Nearest Neighbor	4.641*	12.072***	-3.221	5.359
	(2.757)	(3.111)	(2.847)	(3.369)
Mahalanobis: Nearest 2-Neighbors	5.222**	6.815***	-1.791	3.197
	(2.532)	(2.433)	(3.132)	(3.110)
Mahalanobis: Nearest 3-Neighbors	5.702***	8.025***	-1.972	3.130
	(2.133)	(2.391)	(3.014)	(2.862)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D15: Effect of Labor Market Reform on Firm Dynamism: Retail

	(1)	(2)	(3)	(4)
Matching Method	3-Year	5-Year	7-Year	10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-8.674**	-10.642**	-6.769	-7.415*
	(3.994)	(4.920)	(4.401)	(3.808)
PSM: Nearest 2-Neighbors	-8.757**	-9.587**	-5.463	-7.121**
	(3.483)	(4.409)	(4.189)	(3.466)
PSM: Nearest 3-Neighbors	-9.754***	-11.593***	-5.353	-6.194*
	(3.438)	(4.149)	(3.607)	(3.358)
Mahalanobis: Nearest Neighbor	-9.959***	-13.888***	-4.980	-10.917***
	(2.721)	(2.779)	(3.046)	(2.601)
Mahalanobis: Nearest 2-Neighbors	-10.992***	-12.894***	-6.376**	-9.177***
	(2.665)	(3.231)	(3.214)	(2.543)
Mahalanobis: Nearest 3-Neighbors	-11.125***	-13.341***	-6.604**	-7.413***
	(2.607)	(3.127)	(3.170)	(2.380)
Exit Rate Growth				
PSM: Nearest Neighbor	0.492	-0.078	1.690	-1.681
	(3.269)	(3.834)	(4.085)	(3.914)
PSM: Nearest 2-Neighbors	2.256	3.217	-0.443	1.008
	(2.757)	(3.450)	(3.536)	(3.273)
PSM: Nearest 3-Neighbors	1.991	2.893	0.094	1.286
	(2.498)	(3.120)	(3.255)	(3.070)
Mahalanobis: Nearest Neighbor	2.118	4.843*	-0.601	0.104
	(2.091)	(2.693)	(2.826)	(2.788)
Mahalanobis: Nearest 2-Neighbors	3.463*	3.525	0.130	0.169
	(2.063)	(2.156)	(2.393)	(2.247)
Mahalanobis: Nearest 3-Neighbors	3.538*	3.838*	0.277	-0.478
	(1.928)	(2.007)	(2.401)	(2.217)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D16: Effect of Labor Market Reform on Firm Dynamism: Transportation and Public Utility

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-10.672*	-12.767*	-4.551	-5.897
	(5.699)	(6.679)	(6.622)	(6.946)
PSM: Nearest 2-Neighbors	-10.674**	-9.467	-3.598	-6.561
	(5.072)	(5.919)	(5.668)	(6.145)
PSM: Nearest 3-Neighbors	-11.674**	-11.502**	-4.501	-3.806
	(4.609)	(5.587)	(5.173)	(5.549)
Mahalanobis: Nearest Neighbor	-5.672	-14.229***	-1.807	-8.831
	(4.343)	(4.994)	(4.964)	(7.033)
Mahalanobis: Nearest 2-Neighbors	-9.451***	-14.048***	-2.848	-3.676
	(3.115)	(4.592)	(4.160)	(5.467)
Mahalanobis: Nearest 3-Neighbors	-9.964***	-14.708***	-3.082	-2.266
	(3.091)	(4.466)	(4.183)	(5.057)
Exit Rate Growth				
PSM: Nearest Neighbor	6.989	-3.000	-3.762	-4.477
	(4.847)	(5.030)	(4.881)	(5.232)
PSM: Nearest 2-Neighbors	7.708*	-0.719	-2.746	-1.923
	(4.332)	(4.263)	(4.387)	(4.925)
PSM: Nearest 3-Neighbors	6.884	-1.118	-1.617	-2.469
	(4.209)	(4.187)	(4.182)	(4.522)
Mahalanobis: Nearest Neighbor	7.873**	3.154	-0.978	2.449
	(3.663)	(3.691)	(3.841)	(4.284)
Mahalanobis: Nearest 2-Neighbors	7.503**	2.194	-0.876	2.801
	(3.297)	(3.647)	(3.252)	(3.849)
Mahalanobis: Nearest 3-Neighbors	7.648**	3.007	-1.489	1.308
	(3.027)	(2.999)	(3.231)	(3.852)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D17: Effect of Labor Market Reform on Firm Dynamism: Finance, Insurance, and Real Estate

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-9.744*	-11.862*	-4.135	-1.706
	(5.581)	(6.791)	(6.619)	(6.810)
PSM: Nearest 2-Neighbors	-5.783	-11.620*	-4.301	0.183
	(4.846)	(5.942)	(5.424)	(5.980)
PSM: Nearest 3-Neighbors	-7.149	-13.281**	-4.506	0.094
	(4.579)	(5.504)	(5.155)	(5.581)
Mahalanobis: Nearest Neighbor	-7.160*	-18.291***	-3.286	1.369
	(4.130)	(4.454)	(4.441)	(5.466)
Mahalanobis: Nearest 2-Neighbors	-7.822**	-13.244***	-4.303	-0.350
	(3.381)	(4.372)	(4.056)	(5.070)
Mahalanobis: Nearest 3-Neighbors	-7.506**	-12.805***	-3.377	1.259
	(3.012)	(4.065)	(4.019)	(4.733)
Exit Rate Growth				
PSM: Nearest Neighbor	6.211	-1.007	-3.385	1.277
	(4.788)	(5.582)	(6.234)	(5.849)
PSM: Nearest 2-Neighbors	5.686	1.882	-4.951	1.989
	(4.144)	(5.011)	(5.425)	(5.214)
PSM: Nearest 3-Neighbors	5.799	1.688	-6.276	2.002
	(3.884)	(4.348)	(4.945)	(5.070)
Mahalanobis: Nearest Neighbor	6.470**	0.195	-8.684**	2.974
	(2.621)	(3.534)	(3.841)	(5.154)
Mahalanobis: Nearest 2-Neighbors	6.042**	0.559	-5.449	1.629
	(2.836)	(3.060)	(4.049)	(4.300)
Mahalanobis: Nearest 3-Neighbors	6.270**	1.266	-3.853	1.823
	(2.619)	(2.326)	(3.968)	(4.180)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. The bottom panel presents estimates of the growth in the firm exit rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.

Table D18: Effect of Labor Market Reform on Firm Dynamism: Services

Matching Method	(1) 3-Year	(2) 5-Year	(3) 7-Year	(4) 10-Year
Entry Rate Growth				
PSM: Nearest Neighbor	-7.340**	-7.913**	-4.915	-3.434
	(3.004)	(3.477)	(3.130)	(2.899)
PSM: Nearest 2-Neighbors	-6.303**	-7.984***	-5.080*	-3.649
	(2.434)	(3.022)	(2.843)	(2.631)
PSM: Nearest 3-Neighbors	-7.004***	-9.395***	-4.924*	-3.244
	(2.347)	(2.958)	(2.525)	(2.343)
Mahalanobis: Nearest Neighbor	-7.246***	-10.671***	-3.944*	-3.148
	(2.049)	(2.133)	(2.117)	(2.021)
Mahalanobis: Nearest 2-Neighbors	-8.162***	-10.293***	-4.887**	-3.949**
	(1.857)	(2.264)	(1.873)	(1.826)
Mahalanobis: Nearest 3-Neighbors	-7.859***	-9.645***	-4.402**	-3.495**
	(1.645)	(2.050)	(1.916)	(1.694)
Exit Rate Growth				
PSM: Nearest Neighbor	0.004	-5.818*	-4.522	-3.730
	(2.521)	(3.202)	(3.594)	(2.800)
PSM: Nearest 2-Neighbors	0.059	-3.395	-5.787*	-3.299
	(2.311)	(2.768)	(3.160)	(2.552)
PSM: Nearest 3-Neighbors	0.168	-3.706	-5.414*	-2.232
	(2.034)	(2.599)	(2.834)	(2.314)
Mahalanobis: Nearest Neighbor	0.021	-4.710**	-5.065*	-1.677
	(1.738)	(2.374)	(2.780)	(2.392)
Mahalanobis: Nearest 2-Neighbors	1.036	-3.466*	-4.453*	-1.278
	(1.581)	(2.049)	(2.704)	(2.113)
Mahalanobis: Nearest 3-Neighbors	0.521	-3.650**	-4.468*	-1.488
	(1.394)	(1.743)	(2.505)	(2.006)

* $p < .10$, ** $p < .05$, *** $p < .01$. The top panel presents estimates of the growth in the firm entry rate following an economic reform. All estimates are in percentage points. Propensity score matching: standard errors are constructed using bootstrapped standard errors with 1,000 replications. Mahalanobis matching: estimates are adjusted for large sample bias introduced by using continuous covariates as recommended by Abadie and Imbens (2006, 2011); Abadie-Imbens robust standard errors are used.