Open Trade, Closed Borders: Immigration in the Era of Globalization

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Abstract

This paper argues that trade and immigration policy cannot be studied as separate policies but instead scholars must take an integrated view of these two foreign economic policies. Trade and immigration policy are substitutes. The choice of trade policy affects immigration policy in labor scarce countries through its effects on firms. Closure to trade increases the average firm level demand for immigration, leading to immigration openness, and free trade decreases the average firm demand, leading to restricted immigration. To test this argument, I develop a new dataset on the immigration policies of 19 states from the late 18th century through the early 21st century. This is one of the few datasets on immigration policy and is the only one to cover the 19th, 20th and 21st centuries. The data show that indeed, trade policy has the hypothesized effect on immigration; immigration policy cannot be fully understood without examining trade policy. This paper, therefore, suggests that trade and other foreign economic policies should be examined in light of immigration policy and each other as well.

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Introduction

What explains variation in immigration policy, especially policy regulating low-skill workers? A common argument invokes prejudice against foreigners as an explanation for why nations close their economies to immigrants. Yet, this prejudice has been ubiquitous throughout history. Since immigration policy varies, social theories of this sort may be descriptively true but not helpful in predicting variation in policy. Others have turned to the role that native labor has played in protecting its interests against immigration, but these scholars have not explained why labor was able to restrict immigration when it has not been able to restrict trade openness, even though open trade has wreaked as much, if not more, havoc on labor. A third group of scholars have focused on the fiscal costs of immigrants as an explanation for the change in policy over time. While fiscal costs are likely to play a role, this argument cannot explain exclusion prior to the creation of the modern welfare state in the early 20th century. Finally, scholars have examined the power of immigrants themselves. While immigrants clearly affect immigration policy in democracies, they have less voice in autocracies where they can more easily be deported and, even in democracies, they have never been a sufficiently large plurality of the polity to change policy on their own.

What is missing from these political theories is a discussion of trade policy’s effect on the politics of immigration, especially on the preferences and political behavior of firms. According to the Stolper-Samuelson theorem, openness through the movement of people, goods or capital affects prices and wages in the same way, benefiting the abundant factor while hurting the scarce factor. As all three policies have the same effect, economic theory can tells us little about which

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policy or policies states should choose when they want to open their economies. By this logic states’ choices of policy should be idiosyncratic or all three should open or close in tandem since opening any one flow would lead to the same distributional consequences as opening the others. Yet, empirically, trade and immigration policy are rarely opened together nor do states seem to choose these policies idiosyncratically. Instead, states often choose the same set of policies at the same time. For example, in the 19th century, most labor-scarce states — the states most likely to face immigration pressures — chose to open immigration but restricted trade to a greater or lesser degree. In contrast, most of these same states have chosen open trade since the 1950s but have restricted immigration. What explains these patterns and why do we rarely see trade and immigration open at the same time?

I argue that the choice to open or close trade changes the domestic political context in which immigration policy is made. Trade policy affects the composition of firms in the economy and their need for low-skill labor. Trade restrictions in labor-scarce states — the states studied in this paper — lead to an increase in production in labor-intensive industries. Without a concomitant increase in the labor supply, wages will rise throughout the economy. Business interests, especially those producing non-tradable goods or hurt by trade restrictions, have an incentive to push for open immigration when trade is restricted. In contrast when trade is opened, there is a decrease in labor-intensive production as labor-intensive firms go out business. These

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6 Economic historians have considered whether flows of goods, people and capital are substitutes or complements and found ambiguous results. O’Rourke and Williamson 1999.
7 While the conventional wisdom argues that the 19th Century was open to trade, both Frieden 2006; Hatton and Williamson 2008 argue many states protected import-competing industries in their states, especially in the later part of the 19th century and the early 20th century. Also, as shown below, tariffs were higher in most states in the 19th century than today.
8 Firms that are threatened by trade openness may lobby the policymaker for increased immigration or tax breaks to stay in business. However, as I argue below, these subsidies are
firms will no longer push for open immigration. Additionally, these firms lay-off their workers, which depresses wages throughout their economy, reducing other firms need for immigrant labor and incentives to push for open immigration. Policymakers, then, are likely to restrict immigration to appease other constituencies, such as nativists, labor and tax payers concerned about the fiscal costs of immigration.

This paper, therefore, diverges from the majority of the literature on international political economy by arguing for an integrated view of foreign economic policy. More recently, scholars have begun to examine how capital and trade policies act as substitutes for each other, how migration flows affect capital flows and how remittances affect exchange rate policy. I continue this trend by examining the interaction of immigration and trade policy, something that has yet to be considered.

After further explicating the argument of this paper, I turn to testing it on a new dataset of de jure immigration policy for 19 countries from 1783-2010. This is one of the few datasets to measure immigration policy and the only one that covers the 19th, 20th and 21st centuries. To preview, the data show that trade and immigration policy are profoundly interrelated. The 19th century was generally a period of open immigration but relatively closed trade. The Interwar period was a time of general closure to goods and people; although, those states that had more open trade policies restricted their immigration policy to a greater degree. After World War II, difficult to maintain as trade opens further because increased openness necessitates increased immigration or subsidies.

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9 E.g. Copelovitch and Pevehouse 2013.
10 E.g. Leblang 2010.
11 E.g. Singer 2010.
12 While the argument could also be extended to exchange rate policies that act as trade barriers as well as capital policies, I limit this paper to the relationship between trade and immigration for parsimony. See Peters 2014a for more on capital policies.
13 See Bjerre et al. 2014 for a review of immigration policy indices.
most states opened trade but continued to restrict immigration. The data, thus, show that increasing trade openness has lead to increasingly restrictive immigration policies.

**How Trade Policy Effects Immigration Policy**

In this section I examine how trade policy affects immigration policy in (low-skill) labor scarce states towards low-skill immigrants (henceforth, *immigration policy*).\(^{14}\) I focus on labor scarce states because they are where migrants want to move to because of their high wages and, therefore, must decide whether or not to restrict immigration.

I examine policy towards low-skill immigrants for three reasons. First, the vast majority of potential migrants — those who would migrate if they were legally allowed to — are low-skilled.\(^ {15}\) Today 23.5% of migrants have a high level of education; nonetheless, this level of skilled migration is endogenous to the policies in this study — without immigration barriers, the share of low-skill migrants would increase greatly.\(^ {16}\) Second, survey data show that flows of low-skill immigrants are more politicized in immigrant receiving states than flows of high-skill migrants.\(^ {17}\) Most historic episodes of nativism have also been targeted at low-skill migrants, for example, the backlash against Asians and Southern and Eastern Europeans throughout the New World in the 19th and early 20th century. Finally, if we care about economic development, we should determine why wealthy states are not more open to low-skill immigration as low-skill migration has the ability to greatly increase developing world income.\(^ {18}\)

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14 For this paper, I focus on immigration policy towards low-skill immigrants in general, not immigration policy toward any single country. For a discussion of immigration policy towards a sending specific country, see Peters 2014b.

15 Hatton and Williamson 2005.


18 Hatton and Williamson 2005.
I begin by examining a highly stylized economy, which is affected by exogenous shocks in trade policy. For simplicity of the argument, I abstract away from all the other factors that could affect immigration policy, such as regime type, history as a colonial power, national culture and identity, etc.; in the empirical section, I control for these variables.

Assume there is a low-skill labor-scarce economy that at time $t$ has one-third of its firms in the high-skill intensive export sector, another third in the low-skill intensive import-competing sector and the final third in the service/non-tradable sector, which I assume uses mostly low-skill labor. At some point in the future, time $t + 1$, trade is restricted, which increases prices and production in the import-competing sector. As this sector grows, it will attract labor from the service sector and what small amount of low-skill labor that was working in the export-sector. Profits will go down for all firms as the wage for low-skill labor increases. By opening immigration, the policymaker can appease those firms hurt by the increase in wages due to trade restrictions, reducing their opposition to trade barriers. Even though export-oriented firms would like freer trade, the increase in immigration decreases their labor costs and increases returns to their capital. Therefore, we expect that, when trade is closed, firms clamor for open immigration and that the policymaker responds to their demands.

Now, assume that, instead of restricting trade at time $t + 1$, trade is opened for exogenous reasons. Open trade reduces the price of the goods that low-skill intensive firms produce and,

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19 The composition of firms in the export and import-competing sector is a result of the Stolper-Samuelson theorem. If the service sector consists of high-skill intensive firms, it should act in the same manner as the export sector.
20 This result assumes that consumers will buy more domestically-produced, labor-intensive goods as a result of trade barriers rather than consuming less.
21 Under “new, new trade theory,” trade restrictions allow less productive firms to produce as well, also increasing the amount of labor needed.
22 This result is similar to Facchini and Willmann 2005 who find that complementary factors have an incentive to oppose protection for their complements.
under our classic trade models, leads these firms to close.23 When these firms close, they can no longer pressure the policymaker for open immigration. Further, these firms lay-off their low-skill labor, which can now be employed in the service and export sectors. The export and service sectors are, then, less likely to pressure the policymaker for open immigration as well.24 Firms have a limited amount of political capital to spend, which they may want to spend elsewhere given that wages for low-skill labor are already low, or it may not be possible to lower wages further with increased immigration due to a minimum wage.25 As such, the policymaker is likely to restrict immigration to appease groups that dislike immigration, such as nativists, labor and tax-payers. Thus, we expect that when trade is opened, policymakers restrict immigration.26

I now move away from the highly stylized economy to a more realistic economy. In the case of trade closure, firms could increase productivity in response to high labor costs. By increasing productivity, these firms decrease their need for labor and their support for open immigration.27 Similarly, in the case of trade openness, low-skill intensive firms could increase their productivity to decrease their labor costs, which again would decrease their support for open immigration. I expect, then, immigration policy to become more restricted over time as labor-saving technology has increased.

23 The results do not depend on the assumption that firms close, only that labor-intensive production decreases. Similarly, in “new, new trade theory” trade openness leads to the closure of less productive firms, decreasing the need for labor. Helpman et al. 2009.

24 These results implicitly assume that production by non-tradables and export-oriented firms does not increase the demand for low-skill labor. The firms that exit the economy are low-skill labor-intensive and should release enough native low-skill labor for the high-skill intensive export sector. Empirically, rising wage inequality due to increases in productivity and trade seem to bear this out. Feenstra and Hanson 1996.

25 Further, minimum wage regulations mean that wages can only fall so far; after which, more natives will be unemployed, leading to greater taxation to support them.

26 In the US there is evidence that firms’ lobbying strategies change on immigration with globalization and that their lobbying affects policy. See Peters 2014a and Facchini et al. 2011.

27 Helpman et al. 2009 and others have argued that increased productivity necessitates higher skilled labor, not the low-skill qualifications that most immigrants possess.
Another assumption of our trade models is that firms close as soon as trade opens. We know, however, that firms often stay in business after trade openness either by running at a loss or otherwise scaling back production. These threatened firms are likely to lobby the policymaker for support to stay in business through either reducing their labor costs through increased immigration or by subsidizing production. Policymakers may enact increased immigration or tax subsidies if the costs of doing so are outweigh the costs of allowing the firm to close. If the threatened firm closes, the policymaker will lose the tax revenue, jobs and any campaign contributions or bribes the firm would provide. If she chooses to subsidize firms with increased immigration, she will potentially increase the fiscal costs of immigrants and also increase nativist backlash. If she chooses to subsidize firms with tax subsidies, she will have less money to spend on other constituencies and, depending on the trade regime, she may not be able to subsidize the firm without facing retaliation from trading partners.

While the policymaker might increase immigration or subsidize firms at moderate levels of trade openness, increasing immigration or subsidizing firms to keep firms in business becomes more difficult at high levels of trade openness. More trade openness decreases the price of goods more or decreases the prices of more goods. As such, to keep threatened firms in business, the policymaker would need to increase immigration more or give increased subsidies. Yet, we know from current public opinion data\(^{28}\) and from historical examples, such as the backlash against Asians immigrants throughout the New World in the late 19th and early 20th centuries and Muslim and Eastern European migrants in Europe today, that large-scale movements of immigrants are politically unpopular. The policymaker has to balance her desire to keep firms in

\(^{28}\) Goldstein and Peters 2014; Hainmueller and Hiscox 2010.
business with this backlash. At high enough levels of trade, the policymaker will find it less
costly to allow these firms to close than to face the anti-immigrant backlash.

What happens if the change in trade policy is not exogenous? First could the outcome
that trade affects immigration policy occur if the policymaker chooses both policies? Under an
endogenous trade theory model, such as Grossman and Helpman, the policymaker’s choice of
trade policy is affected by contributions (or bribes in an authoritarian context) from firms and
concerns over the aggregate welfare of her constituents. To restrict trade, she has to receive
enough in contributions from import-competing firms to make up for lower contributions from
the export sector, the deadweight loss of trade barriers and the political costs of a more open
immigration policy. Assuming that import competing firms are powerful, we expect that they
should be able to provide enough contributions to gain protection. In fact, this is what happened
in many countries, especially the US and Germany, in the late 19th century.

Hamilton provides us with an example of a policymaker who chose the closed trade, open
immigration bundle to appease the export sector, agriculture. Hamilton famously argued that a
tariff would provide the US government revenue as well as protect infant industries. Yet, he
also understood that agricultural interests opposed the tariffs for several reasons: the tariffs
increased the price of manufactured goods; they might lead to retaliation from Great Britain,
which was the major consumer of US agricultural products, and they would lead to labor
shortages and higher wages. It was likely prohibitively difficult to appease farmers with

29 The Grossman and Helpman 1994 model focuses on sectors, but the framework can be
extended to firms, for example see Bombardini 2008.
31 In comparison to today, agriculture was relatively labor intensive in the late 18th century;
however, in comparison to British agriculture, US agriculture was relatively land intensive.
Herndon 1975.
32 Hamilton 1791.
subsidies at this time. Further, Hamilton could not prevent British retaliation. He could, however, offer increased immigration which would ensure an agricultural labor supply and low wages.\textsuperscript{33} Hamilton, thus, recognized this trade-off between tariffs and immigration policy.

In contrast, when a policymaker chooses open trade — even if she, as benevolent social planner, chooses it because it will increase national income — she is privileging the export and, perhaps service sector, over the import-competing sector. Under a lobbying model, the policymaker will only open trade if the export-oriented firms offer enough in contributions to overcome the contributions of import-competing firms, any losses in welfare from the eventual loss of threatened firms and the impact of a change in immigration policy. Assuming that the export-oriented sector is wealthy enough, it should be possible for them to pay for free trade. Further, one could imagine a cynical policymaker who opens trade specifically to lower business demand for immigration, which would make it easier for her to close immigration. Thus, under an endogenous trade model, the policymaker could be induced to open trade, even knowing that some firms will be lost and immigration will be restricted.

Second, is it possible that immigration policy is driving trade policy? If immigration policy is driving trade policy, we would expect that trade and immigration should be complements or that there is little relationship between the two policies, but they should not be substitutes. Immigration restrictions lead to higher wage costs and make low-skill intensive firms less competitive, which would increase their opposition to trade openness. This increased opposition should make it harder for the policymaker to maintain or increase trade openness, likely leading to trade restrictions. Openness to immigration, on the other hand increases the competitiveness of low-skill intensive firms, leading to less opposition to trade openness. It will

\textsuperscript{33} Hamilton 1791 p. 22.
now be easier for the policymaker to open trade. At extreme levels of openness to immigration, this complementarity between immigration and trade may break down. If immigration openness leads the wage to converge to the world wage, prices for both low-skill and high-skill goods will converge to the world price. As argued by Mundell, at this point there would be no gains from trade, as prices are already equal.\textsuperscript{34} Policymakers could be free to have an open trade policy, an autarkic policy or something in between and prices would stay the same. If immigration is the first mover policy, therefore, trade and immigration should be complements or there should be little relationship between the two, but they should not be substitutes.

Third, is it possible that there is some omitted variable driving both policies? There are many variables that may also affect trade policy and immigration policy, including domestic variables, such as democracy, and systemic variables, such as the existence of a hegemon. Below, I test whether the relationship between trade and immigration policy hold when accounting for these variables.

**Cross-National Immigration Policy, 1783-2010**

One of the major obstacles to research on immigration has been the lack of longitudinal cross-national data. In response to this lacuna, this paper examines data on the de jure immigration policy of 19 countries over the last 225 years. The resulting dataset is one of the few on immigration policy and the only one to cover the 19th, 20th and 21st centuries.\textsuperscript{35} I focus on a de jure measure of policy rather than a de facto measure of flows in part because of data limitations. To use flow data, we would have to account for the factors besides policy that affect flows, including the state of the economy in the receiving state and sending states; the political environment of sending states; transportation costs; migrant networks and so on. As in the trade

\textsuperscript{34} Mundell 1957.
\textsuperscript{35} See Bjerre et al. 2014 for a review of immigration policy indices.
literature, we would need to use a gravity model, incorporating all those variables. While Fitzgerald et al. have examined a gravity model in OECD states post-1960, it is impossible to extend this research to the 19th century or to most autocracies.36 Thus, for the argument in this paper, using flow data would limit our empirical tests to the OECD post-World War II, which would affect the external validity of these tests.

There are two overlapping universes of cases to which the theory could apply. First, the theory applies to relatively (low-skill) labor scarce states. These are states that have relatively high wages in comparison to the rest of the world or in comparison to their major trading partners. Second, we want to ensure that the countries studied are countries that migrants want to move to. If migrants are not interested in moving to the state, the state could choose any immigration policy since migrants would not move regardless of the policy. Previous research on migration suggests that migrants choose locations where wages are high relative to the transaction costs of moving.37 States that are very wealthy are likely to attract migrants from all over the world; while states that are relatively wealthy in comparison to their neighbors are likely to attract migrants from their neighbors but not from countries far away. The states chosen, therefore, are all wealthy, (low-skill) labor scarce states in comparison to the rest of the world or to their neighbors.38

From the universe of wealthy countries, the 19 states and state-like entities were selected (see Table 1) that have a range of values on the important explanatory variables for this study and for the alternative explanations in the literature. For the argument of this study, it was

36 Fitzgerald et al. 2014. See Clemens 2009 for a discussion about the limited immigration data.
37 See Massey et al. 1993 for a review.
38 This criteria was operationalized as states with GDP per capita above 200% of the world average GDP per capita or above 200% of the average GDP per capita for the geographic region for at least 10 years. These two criteria lead to the inclusion of 77 states (or state-like entities) over some part of the time period of 1800-2008.
important to find states that have different levels of trade openness and states that have had both open and closed trade policies. There are several major alternative explanations in the literature that we want to control for as well: interest group explanations based on the power of labor, nativists and immigrants as well as the fiscal costs of immigrants and societal explanations based on whether or not a state was a colonial power, regime type and participation in wars. The states chosen vary in these dimensions as well.

TABLE 1 ABOUT HERE

These criteria mean that Europe is relatively under-sampled in this study in comparison to many studies on immigration. This under-sampling would be problematic if there are ranges of the explanatory variables that are not represented in the study; fortunately, the Nordic countries are similar to the Netherlands on many of the key variables and Portugal, Spain, Italy and Greece’s experience as new immigration countries are similar to that of Japan, South Korea and Taiwan. Thus, the exclusion of these cases should not affect the external validity of this study.

The choice of these 19 states should also provide greater confidence in the external validity of the tests. While in IPE we often test our theories on OECD states, I include states like Saudi Arabia and Kuwait that have very different decision-making processes than democracies. If the same relationship holds in these states, it will increase the external validity of the argument.

There are two other coding decisions to make with regards to case selection: how to handle federal states and when to begin the analysis. All federal states are coded according to the policy of the most open member of the state until the time when the federal government takes sole responsibility for immigration policy, at which point the federal policy is coded. Because
most federal states allow the free movement of persons among their members, an immigrant who can enter one member can have access to them all. Every state was coded through 2010, but they enter the dataset when they gain control over their immigration policy, either when they obtain responsible government, independence, or come into existence in their current form.

Similar to trade, there are many different ways to regulate immigration. This study includes data on all laws on immigration and immigrant rights. Immigration policy is an amalgam of several policies, including policies that regulate who gains entry to the state (border regulations), what rights immigrants receive (immigrant rights) and how the border is enforced (enforcement). Within each of these three categories, states have used numerous policy substitutes. After an exhaustive reading of over 350 primary and secondary sources on the immigration policies of countries in Europe, the Middle East, East Asia, and the New World, I determined that there are 12 dimensions of regulations that are important for testing the hypotheses of this paper. Eight of the dimensions regulate entrance to the state, of which four, work prohibitions, family reunification, refugee and asylee policy, could also be considered rights; two cover immigrant rights and two cover enforcement. Table 2 lists the different

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39 Due to this coding, only US federal policy is coded. Prior to the 1848 Passenger Cases decision, many states enacted their own immigration policies; however, immigration was unrestricted through some ports of entry. The policies that states enacted were similar to the 1875 Federal Immigration Act. Neuman 1993. Coding the US using these state policies does not affect the results. Among EU members, each individual state is coded because freedom of movement does not extend to third country nationals. See Appendix B for more details.
40 See Appendix B for more details.
41 Administrative actions were not included because they have not been documented in a systematic way.
42 A list of sources used to compile the dataset can be found in Appendix B.
dimensions in each category and gives a brief description. Each dimension was coded from 1 to 5, with greater restrictions taking lower values.

**TABLE 2 ABOUT HERE**

Border regulations are often what we think of as immigration policy: policies that determine who gains entry to a state (Figure 1; higher values reflect a more open policy). The preferred method of control in the late 19th century was by national origin, for example the Chinese Exclusion Act in the US and German laws against Polish migration. After World War II, nationality as a basis for restriction was delegitimized and skill requirements often replaced nationality requirements as a way to restrict the same immigrants. Yet, nationality restrictions are still used today, cast in a more positive light as free migration areas (FMAs), such as the EU. Similar to free trade areas, FMAs can lead to “migration diversion” as states often open their borders to migrants from within the FMA while restricting migration from outside the FMA. For example, as most EU members have opened their borders to migrants from within the EU, they have restricted access from outside of the EU. For this study, what matters is the overall openness to low-skill immigration; thus, joining an FMA or a bilateral labor migration treaty only leads to greater openness if it does not lead to migration diversion.

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43 A more detailed explanation the dimensions and their coding can be found in Appendix B. Other migration policy dataset use similar categories. For example IMPALA uses eight different categories: economic migration, family reunification, student migration, humanitarian migration, naturalization, irregular migration and bilateral agreements. Gest et al. 2014.

44 Theoretically, immigration policy has no bounds; states could always pay people money to come to their country — e.g. South African recruitment policy in the 1960s — or states could denaturalize part of their population and force them to leave — e.g. Nazi policy against the Jews. These examples are very rare.

45 The data were combined using principal components analysis, which revealed only one factor.

46 I code skill requirements as restrictions because I am interested in openness to low-skill migrants.
Another way states have regulated entry is through recruitment measures; at times states have allowed private firms to recruit workers, at times they have recruited workers themselves and at other times they have prohibited recruitment. States have also regulated entry by controlling access to their labor markets, limiting the availability of positions in certain industries. Further, states have allowed varying levels of family reunification and some states have used numerical quotas. In general, we see that, while there have been some variation in border regulations, they have gotten more restrictive over time.

FIGURE 1 ABOUT HERE

Additionally, states have varied in their openness to refugees and asylees. No state had a formal refugee policy prior to World War II and many states still do not. In contrast, after World War II most states created asylum policies that were fairly generous at first but have been curtailed in recent years. These policies are categorized as border regulations, rather than rights, because refugees and asylees are often thought of as economic migrants in disguise and they often enter the labor market once granted entry. Because of this, firms have been keenly interested in refugee and asylum policy. In the 19th century, for example, agricultural interests in Canada and Argentina lobbied for recruiting persecuted minorities in Eastern Europe and Russia to work on their farms. After World War II, Congressional Lobbying Reports show that the American Farm Bureau lobbied for the Displaced Persons Act in hopes of receiving agricultural labor. Similarly to the rest of the border regulations, when we include refugee and asylum policies we see that these regulations have generally become more restrictive over time. While some states that had not previously adopted refugee and asylum provisions — such as Argentina, 47

47 In this paper, a refugee is a person fleeing their country who is outside the receiving state. An asylee is someone who is at the state’s borders or inside the country who claims refugee status.
48 Kay and Miles 1988
Brazil and Japan — began to adopt them in the late 20th century, many other states — including most European states — began restricting them.

States also vary the legal rights they grant to immigrants (Figure 2). While there is no definitive proof that rights affect migrants’ decision of where to move, there is evidence that states act strategically when granting rights. For example, in the 19th century, Argentina, Brazil and Canada granted land to attract immigrants. Recently, the US and many European states have limited access to the welfare system to deter migration. Further, the treatment of immigrants affects the sending-countries’ willingness to allow emigration. In the 1920s, India limited the recruitment of workers due to mistreatment abroad and the Philippines has done so more recently. Knowing this, a strategic state may change the rights they give to immigrants as a way to forestall these types of laws. The most important right is citizenship; citizenship allows the immigrant to have the same rights as natives. Citizenship laws vary from very restrictive, e.g. Saudi Arabia only granting citizenship to foreign-born wives, to very liberal, e.g. several settler states offering citizenship after only a few years’ residence. Other rights have varied greatly too, including the right to own land or a business, access to the welfare system and even, occasionally, the right to vote. The trends in citizenship and other rights have been more varied than the trends in border regulations. New democracies have tended to increase both citizenship and other rights; established democracies have increased citizenship while decreasing other rights (especially welfare access) and autocracies have increased rights without increasing citizenship.

FIGURE 2 ABOUT HERE

Finally, states have used a myriad of different enforcement policies, but most states have increased enforcement in recent years (Figure 3). It is important to measure enforcement as a
restrictive immigration policy that is not enforced is similar to an open policy.\textsuperscript{49} Deportation is often used to enforce immigration laws; yet, there has been great variation in who can be deported and the form of the deportation process. The dimension “other enforcement” captures the variety of other measures states use to enforce their laws, including employer and carrier sanctions, fences and border patrols and amnesties for those in the country illegally. As can be seen from the graphs, almost all states have increased enforcement over the last half century.

\textbf{FIGURE 3 ABOUT HERE}

The goal of a state’s immigration policy is to attract (or repel) a certain number of immigrants. While there is no consensus on how these different dimensions affect the flow of migrants, it is clear that not all dimensions affect migration equally. To combine these different policies into a single measure, I use principal components analysis. The analysis reveals that these dimensions combine to create two different factors: immigration policy and rights of immigrants.\textsuperscript{50}

The first factor, immigration policy, places more weight on nationality, skill, recruitment, quotas, enforcement and deportation policies than the second, rights of immigrants, which places more weight on family reunification, refugee, asylee, citizenship, rights and work prohibition

\textsuperscript{49} Ideally, we might use a measure of effectiveness of enforcement; however, there are few reliable estimates of undocumented migrants. My ranking of states’ deportation and enforcement rules generally conform to the ranking of state capacity for enforcement in Massey 1999.

\textsuperscript{50} There are four eigenvalues above 1, but the third and fourth eigenvalues do not describe much of the variation (see Appendix A Table A8). In this coding, refugees, asylees and family policies were coded as a 1 until there was a policy on these issues in place. As a robustness check, I coded these policies as a 5 for years with no policy and as a 1 once there was another policy in place that would exclude a refugee, asylee or family reunification immigrant. This coding produced just one factor, which correlates with the coding of immigration policy at 0.9. Additionally, the data for eight countries were recoded by a second coder; the two codings correlate at 0.9.
policies; hence, the names for the two factors (Table 3).\textsuperscript{51} Henceforth, I focus on the immigration policy factor. The immigration policy variable now takes values between 2 and -2, with higher values signaling a more open policy.\textsuperscript{52}

TABLE 3 ABOUT HERE

Figure 4 shows how immigration policy has changed over the last 225 years (more open policies take higher values). Most importantly, we see that, while states have used different regulations to control their border, these regulations have had a similar effect on the openness of immigration policy towards low-skill workers. The data also confirm the conventional wisdom on the restrictiveness of immigration policy: among those states that had control of their immigration policy in the 19th century, their immigration policy is more restrictive today than it was in the 19th century.\textsuperscript{53} Moreover, most states have increasingly adopted restrictions, at least since the end of the Bretton Woods era.

FIGURE 4 ABOUT HERE

The policy coding may seem, at first glance, to be at odds with immigrant flows. By measures of stocks, Saudi Arabia and Kuwait, with 25\% and 62\% foreign born respectively, should be very open.\textsuperscript{54} Similarly, the United States looks as open today as it did 100 years ago if we examine the total flows.\textsuperscript{55} However, we must ask what is the proper counterfactual level of immigration in the absence of these restrictive policies?

\textsuperscript{51} The first factor correlates highly (at 0.95) with a standardized average of nationality, skill, quota, recruitment, work prohibitions, deportation and enforcement.

\textsuperscript{52} Combining the data from the 19\textsuperscript{th} century through today as well as combining data from the different countries can lead to compression of recent changes.

\textsuperscript{53} Hatton and Williamson 2005, 2008

\textsuperscript{54} Ratha and Xu 2008

\textsuperscript{55} Office of Immigration Statistics 2010
The counter-factual level of immigration would likely be much higher than the actual level if policy was less restrictive. Transportation costs have dropped precipitously with the rise of air travel; rising incomes worldwide have released the poverty trap that kept many from migrating; and globalization has increased flows by disrupting the traditional economy of sending states. Therefore, it is not surprising that surveys find that 13% of people worldwide want to migrate whereas 3% has migrated.

Nonetheless, we expect that the policy correlates with flows once we control for the demand to immigrate. As a simple test (Figure 5), I plot immigration policy and flows over million dollars of GDP for a small sample of country-years for which flow data is available: the OECD states along with longer series for the US and Canada. By standardizing by GDP I control for the demand to migrate due to economic growth in the receiving state. Additionally, we can get a sense of what the counter-factual demand for immigration might be if firms used the same amount of labor per million dollars produced today as they did in the past.

FIGURE 5 ABOUT HERE

From the immigrant flow data, we can observe three things. First, immigration per million dollars has been shrinking in many states. For example there were fourteen immigrants per million dollars of GDP in Canada and 8.7 per million dollars in the US at the height of immigration in the 19th century whereas today there is 0.29 per million dollars of GDP in Canada and 0.12 in the US today. Thus, if there were as many immigrants per dollar of the economy today, there would be 48.3 and 72.5 times as many immigrants in Canada and the US,

56 Sassen 1988
57 Survey data are from Clifton 2014. Migrant stock data are from United Nations Development Program 2009.
59 Massey et al. 1993. The results are similar if we use flows standardized by GDP per capita.
respectively. Additionally, Figure 5 shows that states can open their borders but immigrants will not necessarily respond. For example, when immigration is very open, as was the case in Canada and the US in the 19th century, immigration fluctuated with the state of the economy, even controlling for GDP. Finally, states can also increase restrictions without affecting the flow due to factors beyond their control. For example, the flow of migrants to France jumped in the early 1990s even though policy remained restricted due largely to the Algerian civil war.

Nonetheless, immigrants standardized by GDP correlates well with the immigration policy. I regressed the standardized flows on immigration policy in a simple model with fixed effects. The coefficient on policy is 1.43 (p=0.007). Thus, a one standard deviation increase in immigration policy for these countries leads to 1.25 more immigrants per million dollars of GDP.

Examination of the flows standardized by GDP also confirms the some of the counter-intuitive results of the policy variable. For example, the US is coded as having the most restrictive policy in the 2000s. The conventional wisdom is that the US is much more open to immigration than most other states, especially European states. Yet, when we examine the flows over GDP, we see the US is the most restrictive country. From 2000 to 2010, flows to the US averaged 0.11 immigrants per million dollars of GDP; in contrast the UK averaged 0.22; the Netherlands 0.18; France 0.13; Switzerland 0.64; Germany 0.74; Australia 0.22 and New Zealand 0.22. While US politicians often play up the immigrant character of the country and European politicians often understate it, it appears that Europe is more open, and in some cases much more open, to immigrants than the US.

As a short-hand to explain the immigration policies of the different states, I categorized the states into four categories — settler states, European liberal democracies, export-oriented industrializers and rentier states — that tend to use similar regulations and have tended to have
similar trade policies. The settler states consist of the land abundant states of the New World: the United States, Argentina, Australia, Brazil, Canada, New Zealand and South Africa. The European liberal democracies consist of capital abundant states: the United Kingdom, France, Germany, the Netherlands and Switzerland. The third group — the export-oriented industrializers — are states that industrialized by orienting their markets to export goods: Japan, South Korea, Hong Kong, Taiwan and Singapore. Finally, there are the natural resource rentier states of Saudi Arabia and Kuwait.

The settler states and the European liberal democracies were open to low-skill immigrants throughout most of the 19th century but began to restrict their borders prior to World War I. Most of these policies were strengthened during the Interwar period, especially during the Great Depression. After World War II, these states reopened their doors to some extent before closing them again; however, immigration policy was never opened to the same extent that it was prior to World War I. Much of the literature argues that European countries have more restrictive policies than settler states due to their history as “ethnic states;” however, I find that this is not the case. European countries had only slightly more restrictive policies during the 19th and early 20th centuries, leading to large in-flows of immigrants.60 In the 20th century, Europe again has not been more restrictive than the settler states; in fact, many of the European states have been relatively more open to immigrants than the United States. The export-oriented industrializers comparatively had a relatively restrictive policy immediately after World War II;

60 See Cross 1983 and Libet 1995 on flows to France; Bade 1987 and Herbert 1990 on flows to Germany; Caestecker and Moore 2010 and Lucassen and Penninx 1997 on flows to the Netherlands; Holmes 1988 and Vuilleumier 1992 on flows to Switzerland; and Walvin 1984 on flows to Great Britain. Further, Ferenczi and Willcox 1929 estimates that over 700,000 migrants from Europe arrived in Great Britain between 1891-1905; that on average there were over 200,000 foreign workers each year in France between 1920 and 1924; that almost 3.6 million alien workers entered Germany between 1910 and 1924 and that over a million immigrants, not including immigrants from Dutch colonies, entered the Netherlands between 1865 and 1924.
they relaxed these restrictions in the 1970s and 1980s but have restricted immigration since then. Finally, the rentier states had relatively open immigration policies after World War II but have been restricting immigration since the 1980s as well.

In sum, the immigration policy data show that, even though these groups of states have used different immigration policies, all states have restricted immigration more today than previously. What accounts for these restrictions?

The History of Immigration and Trade Policy

Using the immigration policy variable, we can now examine how immigration and trade policy have been used over time (Figure 6). Trade policy is measured as the percent of imports that are not dutied (more open policies take higher values).61

FIGURE 6 ABOUT HERE

The 19th century was generally the era of (relatively) closed trade but open immigration. For the most part, states chose to restrict trade for reasons orthogonal to immigration policy: they needed to generate revenue — most states lacked the administrative capacity to use other forms of taxation — and to provide a barrier behind which domestic industry could develop. There were also technical barriers to trade, such as the relatively high cost of shipping, that acted as natural barriers. These barriers increased the size of domestic industry. The increase in labor-intensive industries led to increased wages and calls from business for increased immigration.62 For example, in 1875 Bismarck increased tariffs as a way to undermine the

61 Tariff data is from Clemens and Williamson 2004 and was updated by the author. As a robustness check, I have also used membership in the GATT/WTO as a measure of trade policy and found similar results. See Peters 2011.
62 Immigration openness, of course, was also driven by other factors. Settler states saw immigration as a way to increase their hold over their territory. Similarly, in the time of the mass army, France opened immigration as a way to increase its population in response to security threats. Weil 2001.
free-trade National Liberals and increase the government’s revenue.\textsuperscript{63} The reasons for opening trade in this case were largely orthogonal to immigration; Bismarck had pushed for a relatively restrictive immigration policy, including mass expulsions of Poles, a few years prior to this change. Not long after the change in tariff policy, Germany began to re-open their borders to Polish guest workers. The main exception to this pattern was the UK, which had more open trade policies but more restrictive immigration policies than most states and, in 1905, was one of the first states to greatly restrict immigration. France also had more open trade during the middle of the 19th century, but it too had a more restrictive immigration policy than most other states.

At the end of the 19th century and in the interwar period, states closed their door to immigrants and, after the Great Depression, to trade as well. Immigration restrictions were driven by several factors. Labor saving technology likely decreased the need for labor. Shipping and communications technology decreased natural trade barriers and more open trade policies decreases labor-intensive production in some states. The Great Depression was the final blow, leading to autarkic trade and immigration policies. Even though the argument predicts that closed trade should lead to more open immigration; we have reason to believe that this would not happen during a recession or depression. Most firms are not planning to expand production and those that do can likely use native, unemployed workers. Once the unemployment rate returned to its natural level we would expect firms to lobby for more open immigration.

After World War II, most states increasingly adopted policies of open trade but restricted immigration. Again the changes to trade policy were largely orthogonal to immigration policy: many in the West, including Cordell Hull, the US Secretary of State under Roosevelt, Harry Dexter White, the lead US representative at the Bretton Woods conference and John Maynard

\textsuperscript{63} Rogowski 1989 p. 40
Keynes, the lead British representative at Bretton Woods believed that opening trade was a matter of national security for both the US and Western Europe and would help rebuild Europe and bind Western economies, especially the economies of France and Germany, together.\textsuperscript{64} Similarly, the EU was conceived to increase trade in hopes of avoiding yet another European conflict. In comparison, migration, beyond the resettlement of refugees, was not addressed as part of the post-War order — freedom of movement was similarly heavily restricted in the early days of the ECSC\textsuperscript{65} — in part because the US was unwilling to lead on immigration due to opposition in Congress\textsuperscript{66} and in part because many other states were unwilling to reopen to immigration due to fears of large flows of poor refugees. Thus, trade was opened and institutionalized largely to unite and develop the West in face of the Communist threat, a fear orthogonal to immigration.

As the Western economies regained their footing in the 1950s, many settler and European states opened their economies to a small degree to immigration. This openness may have allowed their labor-intensive firms to remain competitive and in turn allowed these countries to further open trade. Yet, there was a backlash to immigration and it was again restricted with the recessions of the late 1960s and early 1970s. Immigration, however, was never opened as far as it had been in the 19th century and today trade is open while immigration is relatively restricted.

The export-oriented economies also followed a similar pattern as the European liberal democracies about twenty years later. These states opened their economies to some trade but keeping their currencies undervalued, which acted as a trade barrier. As standards of living and wages rose and new states industrialized, these states began to open immigration slightly in an

\textsuperscript{64} Barton et al. 2006; Ikenberry 2001
\textsuperscript{65} Geddes and Money 2011
\textsuperscript{66} Holborn 1965
attempt to maintain their competitive edge. Firms in these states continued to lose ground due to exogenous changes in the world economy, especially the rise of China. In the case of Japan, their competitiveness was also affected by US pressure to revalue of their currency. In most of the export-oriented economies, the competitive pressures combined with a backlash against immigration led these states to restrict immigrants. The rentier states, in contrast, kept trade relatively restricted and opened their borders to workers of all skill levels after World War II. Recently they have shifted to a more restrictive immigration policy to develop high-skilled service economies while increasing their openness to trade.

Table 4 examines the relationship between trade and immigration policy more rigorously, by regressing immigration policy on trade policy using an Ordinary Least Squares (OLS) model. Each model contains country and year fixed effects to capture unchanging country characteristics and yearly shocks. In addition, a linear time trend for each state is included to ensure that the relationship is not spurious. Also included are Polity as a measure of regime type, GDP growth, and an indicator variable for war. Model 1 examines all years of the data while the next 6 models examine each historical era from pre-globalization through the post-Bretton Woods era.

TABLE 4 ABOUT HERE

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67 For example, the Japanese relaxed immigration restrictions some with laws that allowed companies to hire foreign low-skill “trainees” in 1989 and allowed Nikkeijin, descendants of Japanese overseas, to work in Japan for three years in 1990. After the start of the Great Recession cut the trainee program drastically and paid Nikkeijin to return to their country of origin.

68 These results are robust to using a structural equations model (SEM) with latent immigration policy as the dependent variable (Appendix Table A11). The SEM analysis ensures that the results are not driven by the way I had combined the 12 dimensions.

69 For example, the linear time trend variable takes a value of 1 for Saudi Arabia in 1950 and a value of 161 for the US in 1950. The results are robust to excluding the linear time trend or including a 5-year moving average of lagged immigration policy (Appendix A Table A10).

70 Maddison 2011; Marshall et al. 2011; Sarkees 2000
Over all years, we see a negative and statistically significant relationship between trade and immigration. A change in trade openness from the 25th percentile to the 75th percentile, or from 17% average tariff level to a 4% average tariff level, leads to a -0.39 (95% confidence interval -0.51 to -0.27) change in immigration policy or about half a standard deviation change in immigration policy. We also see a negative and statistically significant relationship between trade and immigration if we examine each era. Argentina is an outlier in the Post-Bretton Woods period and is excluded from the regression in model 7. After the end of its military dictatorship, Argentina adopted neo-liberal economic policies and it opened immigration by repealing the draconian enforcement policies of the dictatorship. Most recently, Argentina has restricted immigration, in line with the argument of this paper.

The statistical significance of trade in each of the eras should give us greater confidence that we are discovering a true relationship between trade and immigration, not caused by some omitted variable. In terms of our major systemic variables, the eras were marked by multi-polarity, bi-polarity and unipolarity and periods of economic hegemony; had different exchange rate regimes and had different systemic levels of capital openness. It also holds if we examine other major theories of immigration — it holds through different waves of emigration from Europe, Asia and Latin America; through wars and peacetime and through good economic times and bad.

We can have some confidence that the relationship is driven by trade affecting immigration rather than immigration affecting trade. First, as discussed above, if immigration

71 The results in Table 4 are robust to estimation techniques that reduce the weight of outliers (Appendix Table A12).
72 Capital mobility may also affect immigration policy by giving firms the option of taking their capital to labor rather than bringing labor to capital. To do this, firms need to be able to move out of their home country and into another country; the systemic level of capital openness controls for this hypothesis. See Rajan and Zingales 2003 for a similar estimation strategy.
was the driver of trade policy, we would expect immigration and trade policy to be complements or for there to be no relationship between the two; they should not substitutes. Second, as discussed above, countries’ trade policy was often driven for reasons orthogonal to immigration policy.

Table 4 also provides evidence for auxiliary hypothesis from the argument and from the literature. There is a negative and statistically significant coefficient on the years since inclusion variable, which may signal the effect of changes in labor saving technology. We can also conclude that there is no statistically significant effect of regime type (as measured by Polity). This is somewhat surprising. Scholars since Polanyi have argued that the enfranchisement of the masses led policymakers to choose policies that benefit the average citizen. Greater democratization should have led to more immigration restrictions according to this logic, as immigrants compete with natives for scarce jobs. Yet, that is not what we see; however, this may be due to how Polity codes democracy. Further, there is no effect of GDP growth on immigration — states close their doors to immigrants in good times and bad — and there is no effect of engaging in a war.

What about other explanations in the literature for immigration policy? One set of alternative explanations argues that societies see themselves as either immigrant or non-immigrant states and these identities affect the politics of immigration. One way to examine these identities is through the country fixed effects included in the above regression (re-estimated without a constant). The fixed effects on their own have relatively little meaning,

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73 Cross-national data on productivity are relatively scarce. Using data from Comin and Hobijn 2009, I have found a negative and statistically significant relationship between measures of technology adoption for the few states for which the data are available. See Peters 2011.
74 Polanyi 1944.
75 See also Hatton and Williamson 2005.
76 See Freeman 1995; Zolberg 2006.
instead what is important is their relative size. All of the fixed effects are positive, statistically significant and have similar magnitudes (Table 5). For interpretation, Singapore can be used as the reference category; Taiwan has a similar baseline preference for immigration as Singapore and all other states have a baseline preference for greater openness. These patterns do not directly conform to the previous hypotheses about why these different identities exist: the export-oriented and rentier states have smaller baseline preferences than the settler states, but there is little pattern to the size of the fixed effects of the European liberal democracies.

TABLE 5 ABOUT HERE

Another set of alternative explanations look at the role interest groups play. These theories argue that interest groups compete to open or close immigration based on their preferences and policy reflects groups’ relative power. The literature suggests that there are four groups, besides firms, that affect immigration (and also trade) policy: native labor, taxpayers, nativists and immigrants themselves; nonetheless, I expect that trade policy should still have its predicted effect when controlling for these variables. Table 6 examines the relationship between trade and immigration while including these variables. Most of these variables are only available for OECD states for 1950-1995; the Gini coefficient is only available after 1972 and is included in Models 3 and 4. As above, I split the sample into the Bretton Woods and Post-Bretton Woods era to control for systemic level variables.

TABLE 6 ABOUT HERE

First, we see that the negative relationship between trade and immigration policy remains in the post-Bretton Woods period when we control for these other interests. In the Bretton Woods period, these 9 states changed their immigration policies very little (Figure 7), leading to
the null results. Polity now has a statistically significant effect, driven by small changes in France’s score, and should be judged skeptically.

FIGURE 7 ABOUT HERE

Next, I examine the role unions play. Unions oppose immigration because immigrants compete with native labor for jobs and as unions gain strength, they force policymakers to increase the barriers to immigration.77 I include net union density from Golden et al. to measure the strength of labor (models 2, 3, 5 and 6).78 The coefficient on unions is in the hypothesized direction and is not statistically significant in Models 2 and 3 but is significant in Models 5 and 6. This suggests that unions play an anti-immigrant role in the polity.79 Similarly, Timmer and Williamson argue that immigration increases income inequality, which in turn leads voters to push for increased restrictions.80 There is less support for this argument; the Gini coefficient does not have a substantively or statistically significant effect on immigration policy.81

Other scholars have focused on the fiscal costs of immigrants. They argue that citizens oppose immigration because immigrants (are thought to) use more government services than they provide in tax revenue.82 I use Cusack’s measure of taxation for social spending to examine this hypothesis (Models 2, 3, 5 and 6).83 Increasing the size of the welfare state is correlated with immigration restrictions but it is only statistically significant in model 3.

77 Briggs 2001
78 I use the union density measure because it is comparable across countries and covers a greater number of years and countries. Golden et al. 2009
79 Facchin et al. 2011 similarly find that US sectors with greater union membership get fewer immigration visas.
80 Timmer and Williamson 1998.
81 As a robustness check, I have also included the Top Ten Percent Income share and found similar results. See Peters 2011.
83 Cusack 2000a.
Immigration also changes the national culture, which is threatening to some members of society, nativists. As a proxy for nativism, I examine the ideology of the party in power, as nativists join tend to join right parties. If the nativist hypothesis is correct, immigration should be more restrictive under right parties.84 I find the opposite of the hypothesized effect; right parties are more supportive of immigration than left or center parties.85 Both right and left parties are often split on immigration: right parties often represent both nativists and economic liberals and left parties often represent both cosmopolitans and labor unions. Labor unions, however, tend to be a more powerful interest group on immigration than cosmopolitans, for whom immigration is not often a salient issue. It may be the case that left parties are pulled in the anti-immigration direction more than right parties.

The final set of interest group discussed in the literature are immigrant groups. Immigrants often want open immigration so that their family members or co-ethnics can enter the state and/or so that their place within society will be secure; when immigrants are more powerful, immigration policy should be more open.86 As with nativism, it is difficult to explicitly test the strength of immigrants. In Table 6, I include the total flow of immigrants each year for OECD countries (lagged 5 years due to the endogeneity of flows to policy). If immigrants play a role in immigration policy, an increase in their number should increase their power. Alternatively, if an increase in immigration leads to increased nativism, then an increase in immigration should lead to a more restrictive immigration policy. I find that an increase in the

84 The data on parties are from Cusack 2000b.
85 Conconi et al. 2012 find that Democrats are more supportive of immigration than Republicans; however, Peters 2014a finds that Democrats only became more pro-immigration in the late 1970s and that most of the partisan divide can be explained by differences in the exposure of firms in senators’ districts to trade pressure and their ability to outsource production.
86 Tichenor 2002
total flow of immigrants leads to a more restrictive policy in the Post-Bretton Woods era.\textsuperscript{87} This suggests, as argued above, that if immigration policy is opened too far, the policymaker will face a backlash leading to a less open policy.\textsuperscript{88}

**TABLE 6 ABOUT HERE**

As a final test, I examine whether the relationship between trade and immigration is generally in equilibrium together — i.e. whether a shock to trade policy leads to an adjustment in immigration policy and whether a shock to immigration policy leads to an adjustment in trade policy. To examine this relationship, I use an error correction model (ECM), following the Engle-Granger method, on the relationship between immigration policy and tariffs (Table 7). The ECM tests for cointegration, i.e. it tests whether — even if both series are increasing or decreasing overtime — they are increasing or decreasing together. I estimate it on tariff levels rather than trade policy — as tariffs increase, so too should immigration policy and vice versa — as most ECM models examine phenomenon that move in the same direction. The data on immigration policy and tariffs have been scaled so their distributions have the same magnitude. Model 1 examines all the data and Models 2 and 3 split the sample before the end of World War II and after World War II. Before World War II, states changed their immigration policy relatively infrequently; changes to immigration policy only occurred in about 25\% of the country years. After World War II, as was the case with many policy areas, states changed their immigration policy much more frequently, in about 75\% of the country years. This suggests that we should estimate these two eras separately. In contrast, tariffs change relatively frequently due

\textsuperscript{87} Conconi et al. 2012 find that Members of Congress from districts with a larger number of immigrants are more pro-immigration; however, Peters 2014a finds no effect of the number of immigrants.

\textsuperscript{88} As a robustness check, I examine the power of only those immigrants who can gain citizenship. I recode the immigration policy variable excluding citizenship and regress it on the measure of citizenship and find similar results (see Appendix Table A14).
to both policy and price changes. From the data, it appears that the zero lag model is appropriate for all time periods.\textsuperscript{89}

\textbf{TABLE 7 ABOUT HERE}

From Table 7 it is clear that in all the data, tariffs and immigration policy are linked — the error correction term is statistically significant for both policies in the first and third model and is statistically significant for tariffs in the second model. Further, as expected, the terms are in opposite directions showing that the two flows will continue to increase or decrease together after shocks to either policy occur. This means that if tariffs are decreasing (increasing) over time, immigration openness should also decrease (increase). In models 1 and 2, the error correction term, also know as the speed of adjustment term, is larger in the tariff regression; however, there is more variation in tariffs than in immigration policy (i.e. the standard deviation of tariffs is larger than that of immigration policy), meaning that a change in the error correction term has a relatively larger effect on immigration policy than on tariffs. This suggests that immigration policy and tariffs respond to shocks in the other policy at the same relative rate in all the data. In the post-World War II era immigration policy and tariff policy have about the same level of variation (i.e. their standard deviations are about equal) and thus, immigration policy has responded to trade policy faster than trade policy has responded to immigration policy. Overall, the error correction model shows that trade and immigration policy have been linked over the last 200 years.

\textbf{Conclusion}

States’ immigration policies do not conform to the patterns that political analysts expect — sometimes immigration policy responds to increases in democracy; sometimes it responds to

\textsuperscript{89} A test for a five year lag and a two year lag for the pre-World War II and post-World War II eras, respectively, are significant at p<0.1 and are found in Appendix A Table A15.
economic conditions; sometimes to increased nativist sentiment and so on — because all these expectations rely on variation in domestic factors to explain immigration policy, ignoring the international context in which policy is made. This paper argues that other foreign economic policies cannot be ignored: immigration policy cannot be understood without considering the effects of trade policy on a nation’s economy.

By examining data on immigration policy in all its forms, comparable across countries and time, I found that trade and immigration policy are substitutes both economically and politically. The increased use of technology has further allowed firms to use less labor, leading to greater restrictions. In addition this paper examines existing theories of immigration policy. I find that unions affect immigration policy and that high-levels of immigration leads to a backlash, as predicted. Most of the other dominant theories of immigration policy, however, are not supported by the data.

Trade and immigration openness should be viewed as substitutes as economists predicted because of their effects on the national economy and industry, which lead to changing political support for the different policies. Closure to trade leads to greater production of low-skill labor intensive goods, driving up the demand for low-skill labor and wages and leading to pressure from firms for increased immigration. Openness to trade subjects those same labor-intensive firms to increased competition, leading them to close their doors or become more high-skill intensive. Either way the demand for labor is reduced and immigration can be restricted.

While economists argue that trade and immigration policy are substitutes, they make few predictions about how the choice of one policy affects the other policies. This paper has shown that the sequencing of policies matters because the choice of one policy profoundly affects the domestic political context in which the other policies are made. In the 19th century, the choice to
close trade to generate tax revenue and protect infant industries increased the demand for open immigration. After World War II, the choice to open trade first reduced the demand for open immigration and allowed policymakers to restrict immigration.

In sum, this paper increases our understanding of policy formation by examining the role that international factors play in constructing domestic policy. Economists have long argued that the movement of goods, people and capital are substitutes; yet, political analysts have frequently ignored this argument when they have studied these three policies. Instead, these scholars have mostly focused on domestic factors and have therefore missed the effect that other foreign economic policy choices have on any discrete policy. This paper brought these international factors back into focus by arguing the choice of a given policy can have a path dependent effect on other policy choices; the sequencing of the policies matters. Immigration policy cannot be understood without examining trade policy. Similarly, trade and other foreign economic policies should be examined in light of immigration policy.


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# Tables and Figures

## Table 1: Countries included in the dataset and the dates of inclusion

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<th>Date (Year)</th>
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## Table 2: Dimensions of immigration policy

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<th>Dimension</th>
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<td>Border regulations</td>
<td>Nationality</td>
<td>Number of nationalities restricted</td>
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<td>Skill</td>
<td>Restrictions based on skill or wealth</td>
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<td>Quotas</td>
<td>Numerical limits on entry</td>
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<td>Recruitment</td>
<td>Policies aimed at recruiting immigrants</td>
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<td>Work prohibitions</td>
<td>Restrictions on industries or positions held</td>
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<td>Family reunification</td>
<td>Distance of relatives allowed special entry</td>
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<td>Entrance policies for refugees outside the state</td>
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<tr>
<td></td>
<td>Asylum policy</td>
<td>Entrance policies for those claiming refugee status at the border</td>
</tr>
<tr>
<td>Immigrant rights</td>
<td>Citizenship</td>
<td>Who can be a member of the state</td>
</tr>
<tr>
<td></td>
<td>Other rights</td>
<td>Other rights immigrants possess</td>
</tr>
<tr>
<td>Enforcement</td>
<td>Deportation</td>
<td>Who can be deported and how</td>
</tr>
<tr>
<td></td>
<td>Other enforcement</td>
<td>Other enforcement measures in place</td>
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</tbody>
</table>
Table 3: Factor Loadings

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor Loading</th>
<th>Factor Loading</th>
<th>Uniqueness</th>
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<tbody>
<tr>
<td></td>
<td>Immigration Policy</td>
<td>Rights of Immigrants</td>
<td></td>
</tr>
<tr>
<td>Nationality</td>
<td>0.3871</td>
<td>0.1452</td>
<td>0.8291</td>
</tr>
<tr>
<td>Skill</td>
<td>0.7439</td>
<td>-0.0363</td>
<td>0.4453</td>
</tr>
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<td>Quota</td>
<td>0.4278</td>
<td>-0.431</td>
<td>0.6313</td>
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<tr>
<td>Recruitment</td>
<td>0.5485</td>
<td>0.0713</td>
<td>0.6941</td>
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<tr>
<td>Work Prohibitions</td>
<td>0.4266</td>
<td>0.5465</td>
<td>0.5194</td>
</tr>
<tr>
<td>Family Reunification</td>
<td>-0.691</td>
<td>0.4364</td>
<td>0.332</td>
</tr>
<tr>
<td>Refugees</td>
<td>-0.4837</td>
<td>0.6174</td>
<td>0.3848</td>
</tr>
<tr>
<td>Asylum</td>
<td>-0.4527</td>
<td>0.4399</td>
<td>0.6015</td>
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<tr>
<td>Citizenship</td>
<td>0.2429</td>
<td>0.605</td>
<td>0.575</td>
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<tr>
<td>Other rights</td>
<td>0.4571</td>
<td>0.6359</td>
<td>0.3867</td>
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<tr>
<td>Deportation</td>
<td>0.7411</td>
<td>0.4097</td>
<td>0.283</td>
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<tr>
<td>Enforcement</td>
<td>0.7465</td>
<td>-0.0789</td>
<td>0.4366</td>
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</table>

Table 4: Immigration policy regressed on trade policy by era

<table>
<thead>
<tr>
<th></th>
<th>All Years</th>
<th>Pre-Globalization</th>
<th>19th Cen. Globalization</th>
<th>Interwar</th>
<th>Bretton Woods</th>
<th>Post Bretton Woods</th>
<th>Post Bretton Woods, No Argentina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Openness</td>
<td>-3.04**</td>
<td>-1.81*</td>
<td>-1.68*</td>
<td>-3.25+</td>
<td>-1.27*</td>
<td>-1.33</td>
<td>-3.60**</td>
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<tr>
<td>Years since inclusion</td>
<td>-0.02***</td>
<td>0</td>
<td>-0.02***</td>
<td>-0.03**</td>
<td>0.02</td>
<td>-0.01***</td>
<td>-0.01***</td>
</tr>
<tr>
<td>Polity</td>
<td>0.01</td>
<td>0.06*</td>
<td>0.15</td>
<td>0.02</td>
<td>0.02+</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>GDP Growth</td>
<td>0.17</td>
<td>0.18</td>
<td>0.19</td>
<td>-0.16</td>
<td>0.03</td>
<td>0.16</td>
<td>0.01</td>
</tr>
<tr>
<td>War</td>
<td>0.17</td>
<td>0.96</td>
<td>0</td>
<td>0.2</td>
<td>-0.01</td>
<td>-0.03</td>
<td>-0.03</td>
</tr>
<tr>
<td>Constant</td>
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<td>2.07*</td>
<td>2.79***</td>
<td>6.02*</td>
<td>-1.97</td>
<td>1.78</td>
<td>3.74**</td>
</tr>
<tr>
<td>Country FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Year FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>1577</td>
<td>77</td>
<td>297</td>
<td>298</td>
<td>325</td>
<td>580</td>
<td>548</td>
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<tr>
<td>R²</td>
<td>0.77</td>
<td>0.64</td>
<td>0.53</td>
<td>0.55</td>
<td>0.30</td>
<td>0.36</td>
<td>0.48</td>
</tr>
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</table>

Notes: Robust standard errors in parentheses. + (p<0.10), * (p<0.05), ** (p<0.01), *** (p<0.001)
Table 5: Fixed Effects by Country in Order of Size

<table>
<thead>
<tr>
<th>State</th>
<th>Coefficient</th>
<th>Standard Error</th>
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<tbody>
<tr>
<td>Singapore</td>
<td>2.63***</td>
<td>-0.21</td>
</tr>
<tr>
<td>Taiwan</td>
<td>2.64***</td>
<td>-0.19</td>
</tr>
<tr>
<td>South Korea</td>
<td>2.79***</td>
<td>-0.2</td>
</tr>
<tr>
<td>Kuwait</td>
<td>2.98***</td>
<td>-0.21</td>
</tr>
<tr>
<td>Germany</td>
<td>3.00***</td>
<td>-0.19</td>
</tr>
<tr>
<td>Japan</td>
<td>3.24***</td>
<td>-0.2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>3.58***</td>
<td>-0.19</td>
</tr>
<tr>
<td>US</td>
<td>3.64***</td>
<td>-0.2</td>
</tr>
<tr>
<td>South Africa</td>
<td>4.12***</td>
<td>-0.2</td>
</tr>
<tr>
<td>Argentina</td>
<td>4.15***</td>
<td>-0.18</td>
</tr>
<tr>
<td>New Zealand</td>
<td>4.20***</td>
<td>-0.19</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4.35***</td>
<td>-0.2</td>
</tr>
<tr>
<td>Brazil</td>
<td>4.39***</td>
<td>-0.2</td>
</tr>
<tr>
<td>Canada</td>
<td>4.45***</td>
<td>-0.2</td>
</tr>
<tr>
<td>France</td>
<td>4.58***</td>
<td>-0.21</td>
</tr>
<tr>
<td>Australia</td>
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<td>-0.19</td>
</tr>
<tr>
<td>UK</td>
<td>4.85***</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

Notes: Lines denote whether coefficients are statistically different from each other. + p<0.10, * p<0.05, ** p<0.01, *** p<0.001. Model was run without a constant so that all fixed effects could be reported. Saudi Arabia and Hong Kong are dropped due to lack of trade data.
Table 6: Immigration policy regressed on trade policy and alternative explanations for OECD States 1951-1995

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Trade Openness</td>
<td>2.67</td>
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<td>3.5</td>
<td>-6.23*</td>
<td>-6.63*</td>
<td>-4.44*</td>
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<tr>
<td></td>
<td>(2.39)</td>
<td>(0.98)</td>
<td>(2.09)</td>
<td>(3.14)</td>
<td>(2.08)</td>
<td>(1.59)</td>
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<td>Years since inclusion</td>
<td>0</td>
<td>0.01</td>
<td>0.04**</td>
<td>0</td>
<td>-0.01</td>
<td>-0.03***</td>
</tr>
<tr>
<td></td>
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<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>0.00</td>
</tr>
<tr>
<td>Polity</td>
<td>0.01</td>
<td>0.03*</td>
<td>-0.18**</td>
<td>-0.21***</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.05)</td>
<td>(0.04)</td>
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<tr>
<td>GDP Growth</td>
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<td>-0.73</td>
<td>2.12*</td>
<td>1.47</td>
<td>1.22</td>
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<tr>
<td></td>
<td>(0.37)</td>
<td>(0.48)</td>
<td>(0.74)</td>
<td>(1.12)</td>
<td>(0.85)</td>
<td>(0.72)</td>
</tr>
<tr>
<td>War</td>
<td>0.07</td>
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<td>-0.03</td>
<td>0.05</td>
<td>0.06</td>
<td>0.01</td>
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<td></td>
<td>(0.10)</td>
<td>(0.09)</td>
<td>(0.14)</td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Welfare Taxes</td>
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<td>-0.14*</td>
<td>-0.02</td>
<td>-0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.04)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td></td>
<td></td>
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<tr>
<td>Union Density</td>
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<td>-0.38</td>
<td>-2.03*</td>
<td>-2.14*</td>
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<td>(1.00)</td>
<td>(0.92)</td>
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<td>Center Parties</td>
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<td>0.06+</td>
<td>0.05+</td>
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<tr>
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<td>(0.01)</td>
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<tr>
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<td></td>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
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<td>-0.4</td>
<td>-10.54*</td>
<td>7.35*</td>
<td>10.31**</td>
<td>8.54**</td>
</tr>
<tr>
<td></td>
<td>(2.44)</td>
<td>(2.70)</td>
<td>(3.48)</td>
<td>(2.47)</td>
<td>(2.18)</td>
<td>(2.43)</td>
</tr>
<tr>
<td>Observations</td>
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<td>62</td>
<td>207</td>
<td>154</td>
<td>122</td>
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<tr>
<td>R2</td>
<td>0.22</td>
<td>0.32</td>
<td>0.86</td>
<td>0.48</td>
<td>0.62</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Notes: Robust standard errors in parentheses. + (p<0.10), * (p<0.05), ** (p<0.01), *** (p<0.001). Polity dropped from some models due to colinearity.
Table 7: Error Correction Model of Immigration and Trade Policy by Era

<table>
<thead>
<tr>
<th>DV: Δ Immigration Policy</th>
<th>Model 1 All</th>
<th>Model 2 Pre-1945</th>
<th>Model 3 Post-1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>-0.01**</td>
<td>0</td>
<td>-0.03***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.30***</td>
<td>-0.44***</td>
<td>-0.17*</td>
</tr>
<tr>
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<td>(0.05)</td>
<td>(0.09)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Observations</td>
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<td>944</td>
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<td>R^2</td>
<td>0.01</td>
<td>0</td>
<td>0.02</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DV: Δ Tariffs</th>
<th>Model 1 All</th>
<th>Model 2 Pre-1945</th>
<th>Model 3 Post-1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>0.02***</td>
<td>0.02**</td>
<td>0.01*</td>
</tr>
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<td>(0.00)</td>
<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Constant</td>
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<td>0</td>
<td>-0.13*</td>
</tr>
<tr>
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<td>(0.11)</td>
<td>(0.05)</td>
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<td>916</td>
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<td>R^2</td>
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<td>0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Notes: Residuals calculated from regressions on all years, pre-1946 and post-1946 respectively. Robust standard errors in parentheses. + p<0.10, * p<0.05, ** p<0.01, *** p<0.001.
Figure 1: Border regulations over time

Note: Higher values denote a more open policy. Data coded by author.
Figure 2: Citizenship and other rights over time

Note: Higher values denote a more open policy. Data coded by author.
Figure 3: Deportation and enforcement over time

Note: Higher values denote a more open policy. Data coded by author.
Figure 4: Immigration policy for each state

Note: Higher values denote a more open policy. Data coded by author.
Figure 5: Immigration policy and Immigrant Flows over GDP

Note: Immigrant flows are standardized by million dollar of GDP. Higher values denote a more open policy and greater flows. Immigration openness coded by author. Immigrant flow data is from Citizenship and Immigration Canada 2011; Fitzgerald et al. 2014; Office of Immigration Statistics 2010. GDP data is from Maddison 2011.
Figure 6: Trade and immigration policy

Note: Higher values denote a more open policy. Immigration openness coded by author. Trade openness is one minus the ad valorem tariff rate. Tariff data are from Clemens and Williamson 2004.
Figure 7: Immigration policies in OECD States, 1951-1972

Note: Higher values denote a more open policy. Immigration openness coded by author.