A DUAL POLICY PARADOX:
WHY HAVE TRADE AND IMMIGRATION POLICIES
ALWAYS DIFFERED IN LABOR-SCARCE ECONOMIES?

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## ABSTRACT

Today's labor-scarce economies have open trade and closed immigration policies, while a century
ago they had just the opposite, open immigration and closed trade policies. Why the inverse policy
correlation, and why has it persisted for almost two centuries? This paper seeks answers to this dual
policy paradox by exploring the fundamentals which have influenced the evolution of policy: the
decline in the costs of migration and its impact on immigrant selectivity, a secular switch in the net
fiscal impact of trade relative to immigration, and changes in the median voter. The paper also offers
explanations for the between-country variance in voter anti-trade and anti-migration attitude, and
links this to the fundamentals pushing policy.

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**Introduction**

We live in a world where trade policies are liberal and immigration policies are restrictive. Recent globalization discussions give the impression that this policy difference is a modern phenomenon (Wellisch and Walz 1998; Hillman and Weiss 1999), implying that trade policy was liberal and open on all fronts a century ago. This turns out to be quite wrong. Instead, while most labor-scarce economies today have open trade and closed immigration policies, a century ago the labor-scarce economies had just the opposite, open immigration and closed trade policies. Thus, the inverse policy correlation has persisted for almost two centuries.

Why have policies towards the movement of labor and goods always been so different in labor-scarce economies? After all, importing labor-intensive products is pretty much like importing labor. So shouldn't trade and migration policies reinforce each other? Consider for a moment the simple 2×2×2 model in which trade is driven by factor endowments. Furthermore, let us think about the country where labor is relatively scarce since that's the country for which immigration policies matter. Suppose such a country puts up a tariff to protect the scarce factor, labor. In the absence of immigration, wages will increase. But if labor is allowed to move across borders, the tariff-induced wage increase will be undone by immigration (Mundell 1957). By the same logic, an immigration policy designed to protect domestic labor will be undone by free trade: the desired effect will only be achieved by restricting *both* trade *and* immigration. Simple theory predicts that immigration and import restriction should go together. In fact, they never have. Therein lies the policy paradox.

There are many reasons why reality might deviate from the simple Heckscher-Ohlin and Stolper-Samuelson predictions. Specific factors, increasing returns, and Ricardian differences in productivity are but three. Thus, trade and migration may be less than perfect substitutes, or they might not be substitutes at all (Markusen 1983; Faini, DeMelo and Zimmermann 1999). Nevertheless, the simple model does provide a useful roadmap for exploring the persistent inverse correlation between trade and immigration policy.

The rest of this paper is organized as follows. First, it traces out the histories of trade and migration policy in labor-scarce economies since the early nineteenth century. We find it particularly useful to compare the two great globalization eras: the half century from 1860 to World War I, and the half century from 1950 to the present. Next, we explore some of the fundamentals that have influenced the evolution of trade and immigration policy. Key among them are the decline in the costs of migration and its impact on immigrant selectivity, a secular switch in the net fiscal impact of trade relative to immigration, and changes in the median voter and their impact on the political economy of tariff and immigration policy. We also offer explanations for the variation between countries in voter attitudes towards trade and migration, and link this to the key forces underlying policy. We conclude with some comments about current policies in historical perspective.

### The Evolution of a Dual Policy Paradox Over Two Centuries

One could easily get the impression from today's labor-scarce economies that there is something immutable about a world in which the movement of labor is far more tightly constrained than the movement of goods. But things were very different a century ago. The conventional wisdom views the nineteenth century as the canonical liberal period in which globalization was fostered by free trade and open immigration policies. Such conventional wisdom may fit the predictions of the simple 2x2x2 model in which trade and migration policy go together, but it is a complete myth.

Consider first the evolution of tariff policy. Recent research has shown that protection was at very high levels before 1914, much higher than is often recognized, and especially so in labor-scarce New World economies (Coatsworth and Williamson 2004a, 2004b; Williamson 2005a, 2005b). Figure 1 plots the average *ad valorem* tariff rate for 35 developed and underdeveloped economies between 1870 and 2000, a sample that accounted for about 90 percent of world 1900 population, and even more of its GDP. Figure 2 plots the average tariff rates 1870-1938 for six regions.[1] Tariffs were on the rise

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[1] In addition to the United States, the countries included are: 3 members of the European industrial core (France, Germany, United Kingdom); 3 English-speaking European offshoots (Australia, Canada, New Zealand); 10 from the industrially-lagging European periphery (Austria-Hungary, Denmark, Greece, Italy,

between 1870 and 1890, and from then until World War I they averaged around 16 percent, a value exceeding every subsequent decade except the 1930s. The view that the pre-1914 years were ones of relatively free trade stems from an obsessive focus on the European industrial leaders -- Britain, France and Germany -- whose combined average tariff was no more than 6 or 7 percent. Even lower tariffs characterized Asia and the Middle East, most of which was under the domination of the free-trading European imperial powers. The average for the European periphery was much higher, pretty close to the average for all 35 countries.

The big regional outliers from free trade policy were the labor-scarce European overseas offshoots: Latin America raised tariffs to almost 30 percent by the 1890s; the United States had average tariff rates above 30 percent as late as the 1880s, and still equal to highly protective Latin America by 1900; and the remaining European offshoots reached tariff levels of about 20 percent, double or triple that of industrial Europe. Furthermore, tariffs in labor-scarce economies were far higher on imported manufactures than these averages would suggest. In short, labor-scarce countries with tariff autonomy that were not yet industrialized had high and rising tariffs in the global century before World War I. What produced the spectacular trade boom up to 1914 was not free trade, but rather a transportation revolution that drastically cheapened the cost of trade between countries, and industrial revolutions that augmented GDP and augmented import demand within labor-abundant Europe. The world trade boom would have been much bigger had free trade prevailed in the labor-scarce parts of the world and in the industrially backward parts of Europe.

Dramatic interwar de-globalization saw tariffs soar (and non-tariff barriers multiply), a shift led by the European core and its colonial empire (Figure 2), while the rest of the world simply reconstructed the high protective walls they had erected before 1914. With the resumption of peace in 1945, average tariffs stood at about 15 percent[2] a figure similar to the average for 1870-1914. But by the early 1960s, the trend in world tariff rates was steeply downwards, so much so that by 1970 the average for these 35

Norway, Portugal, Russia, Serbia, Spain, Sweden); 10 from the Asian and the Middle Eastern periphery (Burma, Ceylon, China, Egypt, India, Indonesia, Japan, the Philippines, Siam, Turkey); and 8 from the Latin American periphery (Argentina, Brazil, Chile, Colombia, Cuba, Mexico, Peru, Uruguay).
[2] As noted above, tariffs were *much* higher on industrial goods, around 40 percent.

countries was lower than at any previous period, barring the inflationary war years.[3] The fact that the Third World stuck to highly protective ISI strategies does not change our characterization of the free trade trend since it is the labor-scarce OECD countries that matter to the policy paradox. Tariffs were lower in the half century following 1950 than they were in the half century following 1860, and they would look *much* lower if the comparison was restricted to the labor-scarce immigrant countries. Similarly, tariffs were lower in the last 30 years of the twentieth century than they were in the 30 years following the Cobden-Chevalier Treaty of 1860, the start of the mis-named free trade period.

What about immigration policy? Here, there is no convenient summary statistic to describe immigration restriction, encouragement or neutrality: immigration policies typically involve rationing rather than taxing, so they don't generate tariff-equivalent measures. Furthermore, some countries used complex subsidies involving reduced steerage costs in transit, help with job search upon arrival, and cheap (or even free) land for settlement. The best we have is an index of policy stance constructed for five labor-scarce and immigrating New World countries from 1860 to 1930 (Timmer and Williamson 1998). The five include the United States, Canada, Argentina, Brazil, and Australia and the index ranges from –5 for extreme pro-immigration policy to +5 for extreme anti-immigration policy, and zero for a neutral policy. The average policy stance for these five countries between 1860 and 1890 was mildly pro-immigration. But from the 1880s onwards, Figure 3 documents a gradual tightening as some countries reduced or eliminated their immigrant subsidies, and some started to experiment with outright barriers. This mild trend towards restriction was followed by a very sharp increase, led by the United States introduction of the literacy test in the Immigration Act of 1917 and a quota in 1921, the latter progressively tightened in 1924 and 1928. With the onset of the Great Depression and trouble in local markets, there was a general clampdown on immigration, not just in the five countries underlying the Figure 3 index, but all around the world.

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[3] Most tariffs were imposed as specific duties a century ago, that is, cents per pound and yen per yard, not *ad valorem*, that is, percent of the total franc value. Thus, during inflation, the duties collected per value imported dropped as the value of the import rose, so the imputed *ad valorem* tariff rate fell. During postwar deflation, the opposite was true, when *ad valorem* tariff rates rose to resume their prewar levels.

In summary, over the half century prior to 1914 labor-scarce economies slowly retreated from their initial pro-immigration policies to a more neutral stance, and this trend correlates in the predicted way with rising protection there. However, the level of immigration restriction on the eve of World War I was still benign. The average policy index score in Figure 3 is about zero, implying policy neutrality: thus, immigration policy was still *very* open compared with the high tariff walls these labor-scarce economies had erected over a half century or more. Thus, the paradox: protective trade policy coexisted with open immigration policy in labor-scarce economies before 1914.

The immigration regime that emerged after World War II reflected the full panoply of controls that was the legacy of the interwar period -- nationality laws, passport controls, entry visas and, above all, quotas. Some of these constraints were temporarily lifted early on to accommodate refugee resettlement and guestworker programs in Europe and the United States, and migrant subsidies in Australia and New Zealand were also temporarily resumed. Labor-scarce countries also started to open their doors to immigrants from Latin America and the Third World, an important event that will get more of our attention below. But these temporary easements had disappeared by the early 1970s: guestworker programs in the west had ended, overseas migrant subsidies had evaporated, skill-based points systems had been introduced, legislation which promised to penalize employers of illegal immigrants had been passed, and so on. Immigration policies have become even tougher since the 1970s. The fact that immigration into the labor-scarce OECD has risen significantly does not require some modification of this characterization of the policy trend: world migration would have grown *much* more quickly had post-World War II policies been as liberal as pre-World War I policies. That surge in world migration was triggered in large part by a release in Third World poverty constraints and by the help offered by rising numbers of previous immigrants resident in the OECD (Hatton and Williamson 2005, Chps. 10 and 11).

Ironically, no immigration policy index exists for the recent era like the one plotted in Figure 3 for the earlier period. The best we can do is use the periodic surveys taken by the United Nations which asks governments whether their policy aim is to reduce immigration, increase it or keep it the same. The proportion of labor-scarce developed country governments seeking to reduce immigration increased from 18 percent

in the mid 1970s to 60 percent in the mid 1990s (Table 1). That proportion also increased within less developed labor-abundant countries, but from a much lower base. To repeat, this index does not measure how restrictive immigration policy is, but rather the way governments view their policy intent. Still, the index does suggest that immigration policies have become much more restrictive since the early 1970s.

Thus, another paradox: liberal trade policy coexists with restrictive immigration policy today.

## Comparing Trade and Immigration Policy in the Two Global Centuries[4]

It has become common to compare the first and second global centuries (e.g. Baldwin and Martin 2000). There are both similarities and differences between them, but there is no bigger difference than that of trade and immigration policy. Pro-immigration policies were already established in labor-scarce economies early in the first global century, but trade policy was already protectionist and it became even more so as the century progressed. Pro-trade policies eventually emerged in the labor-scarce OECD as the second global century unfolded, but immigration policies never underwent the same liberal reversal. There are, of course, national eccentricities that leave their mark on the timing and magnitude of individual country policy changes, but they share three common attributes: the fundamentals driving world migration and its selectivity; the net fiscal implications of trade and immigration; and the role of democracy in changing the median voter.

### Immigrant Selectivity, Immigrant "Quality" and Immigrant Policy

In the early 1800s, European overseas emigration was a mere trickle compared with what came later in the century. Those early migrations were led by landed or renting farmers (as opposed to landless labor) and better-off urban artisans (as opposed to unskilled urban labor), typically traveling in family groups with the intention of settling permanently at the New World's frontier. The less fortunate sometimes got their way paid by traveling as indentured servants (or even as convicts), but for most the costs and

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[4] This section draws heavily on Hatton and Williamson (2005, Chps. 16 and 17).

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risks were just too great to make an investment in the move. Those who did migrate came from the relatively developed European northwest, and from the middle and upper parts of the income and wealth distribution. If the overseas native-born had a preference for west European immigrants, there was no need for host governments to develop discriminatory policies to achieve that end since long distance, high transport costs, and poverty at home were barriers enough to prevent immigration from poorer countries in the south and east of Europe, or from Asia, or even by poorer individuals from the richer countries in the European northwest.

Anti-immigration voices got louder in labor-scarce host countries as the nineteenth century progressed, as the immigrant numbers rose, and, most importantly, as their relative skills and education fell. The latter was induced by the gradual disappearance of poverty in Europe, carried by a spreading industrial revolution, and by the fall in the cost of the move, carried by a transportation revolution: both helped release the poverty constraint on the emigration of the poor (Hatton and Williamson 2005, Chp. 4). The upper panel of Table 1 documents this effect by reporting the ratio of the GDP per capita in source countries relative to the host country, where the former is weighted by the changing shares of immigrants by source entering the host country in question. US contemporary observers made much of the declining "quality" of the new immigrants as their source shifted from the richer northwest Europe to the poorer south and east Europe. The US index dropped from 92.3 in the 1870s to 49.5 in the 1900s, or by 46 percent. Over the same half-century, the Canadian and Argentine indices dropped by 42 and 50 percent, respectively.

Although anti-immigrant sentiment ebbed and flowed, there was no call for outright immigrant restriction in the US during most of the nineteenth century, except for the demand for Chinese exclusion in the 1880s by west coast interests.[5] When the US did begin to close the door to immigrants, that policy move was driven largely by complaints from the median US voter (the unskilled and semi-skilled working man in urban occupations) who thought they were being crowded out by the relatively low-skilled 'new

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[5] The US Congress did not debate immigration until the 1890s when the numbers from the poorer parts of Europe began to surge. When incipient flows from poorer regions such as China and Japan began to offer an immigration 'threat' to the west coast of North America (the western US states *and* British Columbia), exclusion was swift and decisive. Thus, the US enacted the Chinese Exclusion Act as early as 1882.

immigrants' from southern and eastern Europe (Timmer and Williamson 1998). After more than two decades of debate, restrictive policy was introduced in 1917 with a literacy test (Goldin 1994) followed by country of origin quotas in 1921, 1924 and 1928. The US quotas had two goals: reducing the total numbers, and reducing the share from poor source countries. Every labor-scarce host country followed the US lead by implementing measures that restricted immigration of the unskilled from poor source countries. But the vast majority of this anti-immigrant selectivity reaction took place after the first global century had ended.

Things have evolved very differently during the second global century. First, discriminatory exclusion of those from poor source countries gradually disappeared, replaced by non-discriminatory immigration policies of which the 1965 Amendments to the US Immigration Act and the abolition of the White Australia policy in the 1970s are but two examples. Removal of discriminatory exclusion might not have mattered much were it not for the fact that the poverty trap was at the same time also gradually unlocked in the poorer parts of the world, and for the fact that family reunification policies allowed the 'friends and relatives effect' to do its multiplicative work. Compared with the native-born, the labor market quality of immigrants deteriorated in the major host countries, and it deteriorated by an even faster pace than it had in the previous century (Hatton 2000; Williamson 2004; Hatton and Williamson 2005, Chps. 8 and 15).

What role did changing immigrant sources play? As the lower panel of Table 2 shows, the US index of source versus host country GDP per capita fell by 54 percent over the half-century between the 1950s and 1990s. The Canadian and German indexes fell by almost exactly the same proportion. The Australian index fell by somewhat less and the British index (from the 1970s) not at all. [6] [7] It should be noted that these declines in

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[6] The figures in the bottom half of the table can be compared with those calculated by the OECD for a larger set of countries for the single year 1997: Australia, 60.7; Belgium, 77.7; Canada, 44.4; Denmark, 70.4; Finland 43.4; France, 28.3; Germany 47.1; Italy, 40.8; Japan, 43.2; Netherlands, 73.4; Norway, 71.8, Sweden, 90.1; Switzerland, 76.3; UK, 71.5; US, 22.0 (OECD 2000, p. 191).

[7] The lack of decline in the UK index may come as something of a surprise, but it may be explained by the following factors: (1) there would probably have been some decline between the 1950s and the 1970s; (2) UK data are for those staying at least a year but not exclusively long-term immigrants; (3) they also include increasing proportion of "immigrants" from the EU who do not require visas; and (4) while the UK did not have a points system it did operate what might be called covertly selective immigration policies (Hatton and Wheatley Price 2005)

source to destination GDP occurred *despite* increasingly selective immigration policies that might have been expected to mitigate it. Having opened the door wider to the poorer parts of the world, restrictions on all potential immigrants had to be tightened with quotas and points systems in order to limit the size of the inflows and to raise the labor market quality of those admitted. Thus, immigration policy is much tougher now than a century ago simply because there are far more potential immigrants from poor countries to keep out.

**The Fiscal Implications of Trade and Immigration**

**Trade and Revenue Tariffs.** Customs duties were a major source of central government revenue in the nineteenth century. In recently independent countries with little experience with tax collection, few bureaucratic resources to implement it efficiently, and limited access to foreign capital markets, customs revenues were an easy-to-collect fiscal source essential to support expenditures on defense and civil administration. This was certainly true of the United States and Latin America in the first half of the nineteenth century, although the US had more success in gaining access to European capital markets. Furthermore, customs revenues were especially important for federal governments in labor-scarce and land-abundant countries since low population and taxpayer density made other forms of tax collection inefficient. The average share of customs duties in total revenues across eleven Latin American republics was 57.8 percent between 1820 and 1890, and the share was even higher for federal governments (65.6 percent), since local and state governments were typically reluctant to give up their limited tax weapons after joining a federation (Coatsworth and Williamson 2004b, p. 216). The share was no lower in the United States. Alexander Hamilton thought "the tariff was more important as a tool of fiscal policy than as a instrument for promoting manufactures" (Irwin 2002, p. 16) and subsequent nineteenth century figures certainly seem to prove him right.

The importance of taxes on external trade for the labor-scarce, newly-independent countries in the first global century, and their unimportance in the OECD in the second global century, can be seen in Table 3. In the mid-nineteenth century, the customs revenue share in total tax revenue was 90 percent for both Australia and the US. As late

as the 1890s, the customs revenue share still averaged almost 58 percent for seven labor-scarce overseas countries. In contrast, the figure for the UK, France, and Germany was about 29 percent, and it was only about 16 percent for the first two. By the time the second global century had emerged after World War II, the customs revenue share had fallen to tiny levels everywhere in the labor-scarce OECD: the average of the six reported in Table 3 for the 1970s is only 4 percent.

**Immigrants and the Welfare State.** In contrast, immigration had little or no fiscal impact in the first global century. Since there was no welfare state, threats to the treasury from immigration were mostly irrelevant: migrants generated no federal income tax revenues and they received no federal transfers. Thus, tariffs brought plenty of fiscal benefits in the era before 1914 while immigrants brought no fiscal costs. With the sharp rise of the welfare state from the 1930s to the 1970s, social services expanded dramatically while federal and central governments diversified their sources of tax revenue. Between 1910 and 1970, social transfers (health, welfare, unemployment, pensions, housing subsidies) as a share in GDP rose in the US from 0.6 to 10.4 percent, an increase of more than *seventeen* times, while it rose from 0.7 to 14.8 percent for the median OECD country, an increase of more than *twenty-one* times (Lindert 2004, Table 1.2, pp. 12-13). These figures confirm that the rise of the welfare state was more dramatic in Europe than it was in North America (up by a factor of 20 in France and 33 in Germany). Figure 4 plots the rise of the welfare state[8] and it documents graphically the dramatic rise between 1930 and 1960, a rise that continued until the 1980s. In short, while the fiscal implications of the immigrants may have been irrelevant in the first global century, they were very relevant in the second global century. Figure 4 also documents an OECD hierarchy in terms of commitment to the welfare state: by 1980, the US and Canada were at the bottom while Germany, France and Sweden were at the top. We will show below how this hierarchy has influenced public opinion about immigration.

The fact that New World immigrants in the late twentieth century suffered a far greater earnings disadvantage in labor markets than did those a century earlier has added

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[8] Welfare spending in Figure 4 includes unemployment benefits, welfare, health and pensions, thus excluding education and housing. The exclusions were necessary to make the 1880-1930 figures comparable with the 1960-1980 figures. The measured rise in the welfare state is in no way affected but these definitions, however.

further fuel to fiscal anti-immigration fires in the modern era. That is, while US immigrant men earned 16.3 percent less than native-born men in 1990, they earned only 6.4 percent less in 1909 (Hatton and Williamson 2005, Chp. 15). Relative to native-born, immigrants today are less productive than they were a century ago.[9] Relative to native-born, immigrants today are therefore far more likely to need social transfers than they were a century ago (when, of course, such transfers were not a possibility anyway). Thus, United States poverty rates in 1959 were 20.9 percent for households with native-born heads and 14.2 for households with foreign-born heads, much lower for the foreign-born. Those rates had reversed dramatically by 1999: 11.8 percent for native-born and 17.4 percent for foreign-born (Hoynes et al. 2005).

Table 4 reports for the EU percentage point differences between immigrants and nationals in their dependence on different welfare benefits in the mid-1990s. For these eight European countries, immigrants have on average higher dependence on unemployment and family benefits, but a lower dependence on pensions. Their higher dependence on the welfare state reflects both demography (the immigrants are younger and have more children) as well as differences in labor market status (the immigrants have higher unemployment rates and lower levels of schooling). Their lower impact on pensions also reflects demography (the immigrants are younger). The table also documents important differences between countries. With the exception of Finland, those EU countries which have been able to positively select educated immigrants, tend to have lower rates of unemployment welfare dependency. With no exceptions, those EU countries whose immigrants have fewer children have lower family benefit dependency. Immigrant characteristics and the generosity of the welfare state interact: the immigrant welfare burden is greatest where they are poorly qualified for the market *and* where the welfare state is relatively generous.[10]

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[9] Much of the source country differences in labor market performance is accounted for by the wage gap between 'old' and 'new' immigrants.[9] The wage gap in 1909 between immigrants from northwest Europe (old) and those from southern and eastern Europe (new) was 6.7 percent. By contrast, the wage gap in 1980 between Europeans and those from Africa, Asia and South America was 30.7 percent. Since wage gaps across major source regions is much wider in more recent times, the effects of changing nationality mix are potentially more powerful.

[10] See also Boeri et al. (2002), Smith and Edmonston (1997), and Hatton and Williamson (2005, Chp. 14).

**Voting Rights, Immigration Policy, and Trade Policy**

It is one thing to identify changes in the immigrant mix and in budgetary imperatives as key elements in the clamor for restrictive policies. It is quite another to explain the process by which these translate into policy. Two key questions are, first who stood to gain and who stood to lose, and, second, who had the vote? The classic analysis of tariff protection starts from the Stolper-Samuelson theorem: owners of the scarce factor(s) should favor protection. Much of tariff history has been written in terms of a three-factor world: labor, capital and land (Rogowski 1989). In land abundant New World countries, the Stolper-Samuelson prediction is that labor should have searched for other scarce factors, like capital, to try and get enough votes to protect them from an invasion of imported labor-intensive manufactures. Owners of land and natural resources should have resisted, lobbying for free trade. Such thinking seems to work relatively well for trade policy but can it also be applied to immigration policy? Let us turn to the second question first: who had the vote?

Figure 5 shows the percentage of adults voting in five New World countries between 1850 and 1940. By 1880 a quarter of adults were voting in North America while in South America the figure was less than ten percent well into the twentieth century. Figure 6 shows a similar contrast between the industrial leaders and the continental followers until about 1910, which marked the beginning of a steep ascent to the interwar period. Although suffrage in the nineteenth century looks very limited, the fact that it was universally male means that male voting rates were roughly twice the rates in Figures 5 and 6. This in turn means that in North America and in the European leaders, voting percolated well down the hierarchy of class and income, giving a strong voice to labor. In South America and the European followers it may have extended down to the urban middle and artisan classes, but not much beyond that.

The story of trade policy in Western Europe is well known. The final abolition of the British Corn Laws in 1846 represents the triumph of labor and capital over landed interests and it was underpinned by the combination of a shrinking share of agriculture and electoral reform that shifted the political balance towards urban interests. Stories that are similar in essence but different in detail and timing can be told for Belgium,

Switzerland and France (Rogowski 1989, pp. 34-38). Farther to the east, the results were different, with Bismarck's marriage of iron and rye reflecting the political strength of a coalition of land and capital. Elsewhere in Europe where land and capital were relatively scarce and where voting was restricted to a small minority, protectionist forces were in the ascendancy from mid-century. One might also have predicted that emigration would have been encouraged in Western Europe and discouraged further south and east, but in fact there was little need for it. As we have seen, until late in the nineteenth century the main transatlantic flows came from the north and west of Europe. When the Southern and Eastern Europe did join, governments found the costs of trying to control emigration too great, and the benefits too limited in the face of crumbling capital/labor coalitions.

In the New World, the United States, Canada, Australia and New Zealand set their tariffs high, once they had the independence to do so. Despite the importance of agriculture, scarce capital and scarce labor won the day in nineteenth century tariff debates. But the story is complicated by the wide diffusion of both voting rights and landholding. Here, tariff revenues were particularly important. They were used to buy the votes of the vast rural interiors in exchange for infrastructure development, particularly railways. In the antebellum US, this was played out as a coalition between the Northeastern and the Western States against the South (Irwin 2005), a coalition that was underpinned after 1862 by the expansion of settlement in the west under the Homestead Act. In Canada, the National Policy of 1879 explicitly aimed to build on the Dominion Lands Act of 1877 to promote western settlement, principally by financing railways with tariff revenue (Pomfret 1981, p. 87). Australian post-Federation policies explicitly aimed to promote a high wage economy by protecting industry at the expense of agriculture.[11]

Given that the capital-labor coalition had the upper hand in these countries, how do we explain why open immigration policies persisted well into the twentieth century? Although anti-immigrant sentiment came and went with the Know Nothing movement in the US, pressure began to build only at the end of the century, and for two reasons. One is

[11] Australia is a particularly interesting case. Until Federation in 1901 it consisted of separate British colonies, the most important of which were New South Wales and Victoria. In Victoria, where manufacturing was important the pre-Federation tariff was high as compared the more agricultural, and largely free trade colony of New South Wales. When the Australia-wide tariff was raised in the first decade of the century, it was explicitly linked to the new minimum wage set under the Harvester judgment of 1907. Import competing firms benefited from the tariff only if they paid the minimum wage; otherwise they would pay an excise duty that cancelled out the effect of the tariff.

that open immigration policy was explicitly linked to the expansion of tariff-financed infrastructure in the interior.[12] The second is that mass migration of low skilled workers from relatively poor countries gained momentum after the 1870s in the US and Argentina, and even later in Canada (Table 2). As Goldin (1994) has shown, in 1917, after 20 years of debate, the political balance eventually tipped in favor of restriction as wage competition shifted northeastern labor against immigration, with the support of the South. Elsewhere too, pressure for restriction mounted with the fact or the threat of low-skilled immigration.[13]

In South America the continuation of open immigration policy is easier to explain, as much of the political power lay in the hands of the free trading *Latifundia*. But things were not quite that straightforward since landowner power would also predict free trade, and contrary to popular belief, tariffs were higher in nineteenth century South America than almost anywhere else. Given literacy and wealth requirements for voting as well as the lack of secret ballots (Engerman and Sokoloff 2000, p. 226), urban capitalists formed the other half of the governing oligarchy. Both groups had strong interests in open immigration but their interests in tariff protection typically diverged. While tariffs would have hurt the exporters of agricultural goods and minerals, the alternative of taxes on land and mineral rights would have been even more painful. As in North America, tariff revenues were important—indeed recent empirical analysis suggests that revenue was the most important determinant of South American tariff levels (Coatsworth and Williamson 2004a). But the political imperatives for revenue were not just (or even mainly) infrastructure for the rural interior (much of which was financed from abroad). Above all these revenues were used to fight the endemic wars that plagued the region.[14]

We might also add that, for South America, low-skilled immigration would have been less of a threat, even if those potentially threatened had had a bigger voice. Populist

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[12] In the US and elsewhere, those moving to the rural interior after mid-century were not necessarily immigrants, but immigration was nevertheless important. In an earlier study, we found that for every hundred immigrants to States in New England, the Mid-Atlantic and East North Central, 40 non-immigrants were displaced, moving west (Hatton and Williamson 1998, pp. 167-9).

[13] Several countries introduced a dictation test ahead of the US. It was one of the first Acts of the newly federated Australian Commonwealth, and because the language was English (strictly speaking it was at the discretion of the Immigration Officer), this formed the basis of what became known as the White Australia Policy.

[14] Centeno (1997) lists 33 major international and civil wars between 1819 and 1880, although this excludes numerous small and medium scale internal conflicts and a number of costly international wars.

regimes that restricted both imports and immigration had to await the Great Depression of the 1930s.

Thus three factors conditioned trade and immigration policies in the labor scarce economies of the New World: revenue needs for development or war; sending country poverty constraints that kept immigration small and selective for most of the period; and the often-limited political franchise. But what about the second great era of globalization: the period since the 1950s? Agricultural interests had declined almost everywhere and the extension of the franchise ensured that the labor's voice gained increasing, if not overwhelming, weight. Democratic governments increasingly needed the support of grass roots public opinion for their policies. For the modern period we can examine individual attitudes directly and so we turn to this next.

**Public Opinion and Public Policy**

Most observers agree that policies should reflect public opinion where the franchise is universal. Thus, attention has focused recently on measuring and explaining individual attitudes towards immigrants and imports. We are interested here in two key questions. First, is public opinion more negative towards immigration than towards trade? If it is, we would then have an explanation as to why trade policies have been more liberal than immigration policies in the postwar era. If it is not, we need to offer an explanation for the apparent conflict between policy and public opinion. Second, what explains individual attitudes towards trade and immigration? What are the individual *and* the country characteristics that determine individual opinions? While the recent literature has explored the former at length, it has devoted very little attention to the latter, and it is the latter that helps unravel the policy paradox.

Recent opinion surveys make it possible to measure the intensity of individual attitudes towards trade and immigration on the same basis across a large number of labor-scarce economies. The most widely used evidence is that taken from the National Identity module of the ISSP survey, conducted in 24 countries in 1995/6. Here we assess opinion in 14 OECD countries in the ISSP survey so as to focus on opinion in those that are relatively labor-scarce. Respondents were asked whether they would like to see

17

immigration increased a lot, increased a little, kept the same, reduced a little or reduced a lot. A similar question was asked about attitudes towards imports and both sets of responses are placed on a scale of 1 to 5, with the value 5 representing the most intense opposition.

The average survey responses to these two questions are presented in Table 5. Three features stand out. First, the average citizen would like to see both immigration and imports reduced. Second, there is very little difference between the average opposition to immigration and to imports. On the basis of this evidence, the reader might find it hard to see why trade policy has been so much more liberal than immigration policy over the last three or four decades. We think there is an obvious answer and we shall return to it shortly. Third, the correlation between attitudes towards immigration and imports across the individuals in the survey are not particularly strong: the correlation coefficient is only about 0.24 for the full sample. Hence, opposition to imports and immigration could very well reflect the attitudes of rather different individuals.

Several recent studies have explored the association between attitudes towards immigration and socio-economic characteristics of the respondents (O'Rourke 2003; Mayda 2004; O'Rourke and Sinnott 2004) as well as their attitudes towards imports (O'Rourke and Sinnott 2001; O'Rourke 2003; Mayda and Rodrik 2005). The regressions in Table 6 follow their lead, but with some significant differences. We estimate ordinary least squares rather than ordered probits, which makes comparison *across* the anti-immigrant and anti-imports equations possible. Even more important, we replace their country dummies (country fixed effects) with a number of country-specific variables that allow us to assign explicit explanations to country differences in public attitude. These country-specific variables are especially relevant to the preceding discussion about the evolution of policy since the mid-nineteenth century, but we are able to include only a few, given the limited number of countries in the ISSP sample. The results are displayed in Table 6, with robust standard errors clustered by country.

Following O'Rourke and Sinnott (2004), we characterize prejudice against things foreign by the variables labeled 'patriotism' and 'chauvinism'. Patriotism is measured by the average response to four questions that elicit the extent to which the individual believes that his or her country is superior to others. Chauvinism is measured by the

average response to three questions that capture the individual's sense of loyalty to his or her country.[15] As the first two columns of Table 6 illustrate, these variables contribute strongly and positively to individual anti-immigration and anti-import sentiment. They provide compelling evidence that this kind of prejudice is an important component of individual attitudes.

Relative to non-immigrants, first generation immigrants are opposed to immigration and imports while the second generation strongly favor immigration but are opposed to expanding imports. Females have stronger anti-trade opinion than males while age has very marginal effects in both equations. Consistent with other studies, the highly educated are more strongly in favor of both immigration and imports. While they may have more enlightened views than the less educated, they may also suffer less from competition from the low skilled and may therefore fear immigration less. Being employed also lowers anti-immigration attitudes, but the effect is relatively small and not significant in either equation. Following previous studies we also interacted the education dummy with the country's GDP per capita and with the country's inequality, but these interactions never proved to be significant when the country-level variables were also separately included and hence they were eliminated.[16]

The remaining variables in Table 6 are the country-specific effects (taking one value for each country). The log of GDP per capita is strongly positive in the equation for immigration opinion but not in the equation for import opinion. This is consistent with the view that immigration depends on absolute advantage while trade depends on comparative advantage. Thus, individual attitudes are more anti-immigration in the richer

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[15] These variable clusters are those identified by O'Rourke and Sinnott (2004, p. 24) using principal components analysis. Those that comprise the patriotism index are the (appropriately scaled) responses to the questions (e.g. for an Australian respondent): (1) "Generally speaking, Australia is a better country than most other countries"; (2) "The world would be a better place if people from other countries were more like Australians"; (3) "I would rather be a citizen of Australia than of any other country in the world"; and (4) "It is impossible for people who do not share Australian customs and traditions to become fully Australian." The components that comprise the chauvinism index (again, appropriately scaled) are: (1) "People should support their country even if the country is in the wrong"; (2) "Australia should follow its own interests, even if this leads to conflicts with other nations"; and (3) "How important do you think each of the following is for being truly Australian … to have been born in Australia?"

[16] The idea underlying these interactions is that the scarce factor should feel more threatened by immigration and by imports. Thus in rich countries, where human capital is relatively abundant, the less skilled should feel most threatened, and the sign of the interaction between high education or skills and GDP per capita should be negative. We obtained the expected sign on the interaction term but the coefficient was never significant in the presence of the absolute level of GDP per capita.

country where there is a greater absolute income gap between it and potential source countries. The level of inequality has a positive effect on both types of opinion. It seems likely that this reflects a general perception that both trade and migration increase inequality in the labor-scarce country. The population variable controls for country size but it has opposite effects on opinion towards immigration and imports and it is not significant in either equation.[17]

Variables specific to the immigration opinion equation are the share of expenditure on welfare in GDP and the share of the population that are foreign nationals. Both of these have strong positive effects. Thus, the higher the percentage of foreign nationals in the population and the more generous is the social security system, the more public opinion opposes immigration. Since high levels of immigration have been associated with immigration from relatively poor source countries, this, combined with generous host-country welfare systems, makes immigrants a bigger perceived fiscal threat to the median voter there.

In the import opinion equation, we include the ratio of imports to GDP and the ratio of OECD trade (imports plus exports) to GDP. Import penetration has the expected positive sign – more imports associated with more trade opposition -- but with very low significance. We expect the coefficient on the OECD trade ratio to take on a much smaller positive sign since trade among rich countries is taken to be far less damaging to unskilled labor. The result is consistent with that prediction since the coefficient is insignificant. In short, economy-wide variables seem to matter much less for imports than for immigration. Adding economy-wide variables raises the $R^2$ by 8 percentage points in the immigration opinion equation but by only 3 percentage points in the import opinion equation. We suspect that this result is driven by the fact that the labor-scarce OECD trades mostly with itself, while its immigrants come entirely from labor-surplus poor sources.

As we noted earlier, the fact that opposition to imports is nearly as intense as opposition to immigration seems inconsistent with observed policy outcomes. That puzzle can be resolved, at least in part, once we recognize that policy itself is

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[17] The population variable was included in order to capture scale effects. For small countries the optimal, or acceptable, trade and immigration ratios may be higher so that the effect of scale is predicted to be positive (a given level of immigrant/import penetration is less acceptable the larger the country).

endogenous. This is illustrated in Figure 7, which depicts anti-immigration and anti-import opinion as upward sloping functions of the immigrant/population ratio and the imports/GDP ratio respectively. The anti-immigration opinion function is steeper than the anti-import opinion function (the result in Table 6) and it crosses the horizontal (dashed) line at a lower level of penetration. If there is a political threshold beyond which negative opinion is translated into policy action, then immigration policy ought to be more restrictive than trade policy in order to gain similar levels of public acceptance.

In the data underlying Table 6 the mean ratio of foreign nationals to population is 6 percent while the mean level of imports to GDP is a little more than 29 percent. Although these ratios are not really fully comparable, they are useful for illustration. If the foreign nationals share was raised by 23 percentage points (from 6 to 29 percent) then anti-immigration opinion would increase by $23 \times 0.044 = 1.01$. Thus, public opinion would become more negative by one full unit on a one-to-five scale. Even an increase in the foreign nationals share by, say, 10 percentage points (well within the range of the data) would increase anti-immigrant opinion by 0.44 units, which is greater than the standard deviation of the country means in Table 5 (0.34). By contrast, policies that increase the import share by 10 percentage points would have only small effects given that the coefficient on the imports/GDP ratio is small and insignificant. Hence, the political 'costs' of liberalization seem to be much greater for immigration than for trade.

**Trade and Migration Policies: Then and Now**

We observe a policy paradox for labor scarce economies in 1900 – restricted trade but unrestricted immigration. We observe a policy paradox again today – restricted immigration but unrestricted trade. What accounts for the policy paradoxes, and why the switch? Let's start with immigration policies.

We have argued that the progressive toughening of immigration policy and the progressive liberalization of tariff policy can be explained by a combination of factors. When the costs and risks of intercontinental migration were large, the 'threat' of low-skilled immigration was muted since few of them could finance the move. Changes in the immigrant mix towards poorer source countries plus the increase in their numbers were

the underlying anti-immigrant fundamentals at work, while macroeconomic shocks were the events that dictated the timing of the sharp changes towards more restrictive policies. As the gap between poor sending and rich receiving countries increased, policy got tougher. In the nineteenth century, immigrants might not have been a burden on the welfare state but they certainly did compete with the native-born in labor markets since immigrant skills were similar to so many native-born. The policy backlash was muted in some places by a limited franchise and delayed in others by developmental coalitions and party politics.

The recent past suggests that differences across countries in anti-immigration opinion are driven by the scale of immigration, which represents the labor market threat, and by the size of the welfare state, which reflects the potential welfare burden. And given a universal franchise those concerns are reflected in tough immigration policies. On the face of it, the puzzle might seem to be that public opinion isn't *more* negative towards immigration. Two explanations account for the puzzle. First, public opinion *would* be much more negative if immigration policies were more liberal. Second, given fairly tight immigration policies, the median *voter* today is less threatened by labor market competition than the median *worker* would have been a century ago. As Table 6 showed, the richer the country, the more anti-immigrant is public opinion, but within a country, more highly educated individuals are less anti-immigrant. The fact that the median voter is no longer unskilled and that the gap between the skills of natives and immigrants has been widening together offer an important reason why opinion isn't even more negative and immigration policies aren't even tougher than they are.

What about trade policies? Recent research has shown that they were much more restrictive in the past than has often been recognized—and especially in labor scarce economies. Why isn't the same true today? While the revenue motive was paramount in the nineteenth century, that imperative waned as revenue sources widened in the twentieth century. But that fact cannot fully explain the evolution from the high tariffs in the past to the low tariffs in the present. After all, there are other motives for protection besides revenue needs. Indeed, the results in Table 6 suggest that anti-import opinion is driven by much the same individual characteristics that determine anti-immigrant opinion. Thus, what applies to immigration also applies to imports: the median voter who

is no longer unskilled faces less of a threat from the low skilled labor embodied in imports from relatively poor countries. And 'prejudice' does just as much damage to import opinion as it does to immigration opinion, and, in any case, why should it change? Thus, the real difference between attitudes (and policies) towards imports and immigration cannot lie with 'prejudice.'

Some clues about the underlying fundamentals can be found in Table 6. First, anti-immigration sentiment increases with the scale of immigration but anti-import sentiment does not increase with the scale of imports, or at least not nearly as much. True, an increase in imports hurts some more than others: using the ISSP data Mayda and Rodrik (2005) find that those who are employed in import-competing industries are substantially more anti-imports than those who are not. Indeed, those who have skills specific to export sectors might be expected to gain. One reason why tariffs were so high a century ago, and so low today, is that the median voter is so different. Today there is a balance across voters between those who lose and those who gain from trade, because trade is more intra-industry than it was a century ago. Hence, an increase in imports has a more mixed effect on public opinion today than it did a century ago.

Second, higher GDP makes opinion more anti-immigration but not more anti-import. The richer the country, the greater the immigration 'threat' from low income countries. For those well below the skills of the median voter, the threat is labor market competition. For the median voter, however, the threat is the fiscal implications of the welfare state. This latter part of the dual threat is far greater now than it was a century ago due to the rise of the welfare state, and due to the fact that the poverty trap, which in the past held emigrants back in their poor sending countries, has been released, thus vastly widening the pool of potential poor and less skilled immigrants compared with the native-born.

# References

Aidt, T. S., Dutta, J. and Loukoianova, E. (2005), "Democracy Comes to Europe: Franchise Extension and Fiscal Outcomes 1830-1938," *European Economic Review* (forthcoming).

Baldwin, R. and Martin, P. (2000), "Two Waves of Globalisation: Superficial similarities and Fundamental Differences." In H. Siebert (ed.), *Globalisation and Labor*, Tubingen, Germany: Mohr.

Barnard, A. (1986), "Some Government Financial Data, 1850 to1982," Source Papers in Economic History 13, Canberra: Australian National University (August).

Boeri, T., Hanson, G. and McCormick, B. (eds.) (2002), *Immigration Policy and the Welfare System,* Oxford: Oxford University Press.

Coatsworth, J. H. and Williamson, J. G. (2004a), "The Roots of Latin American Protectionism: Looking Before the Great Depression." In A. Estevadeordal, D. Rodrik, A. Taylor A. Velasco n(eds.), *FTAA and Beyond: Prospects for Integration in the Americas,* Cambridge, Mass.: Harvard University Press.

Coatsworth, J. H. and J. G. Williamson (2004b), "Always Protectionist? Latin American Tariffs from Independence to Great Depression," *Journal of Latin American Studies* 36 (May), pp. 205-32.

Centeno, M. A. (1997), "Blood and Debt: War and Taxation in Nineteenth Century Latin America, *American Journal of Sociology* 102: 1565-605.

Engerman, S. L. and Sokoloff, K. L. (2000), History Lessons: Institutions, Factor Endowments, and Paths of Development in the New World," *Journal of* Economic Perspectives 14: 217:232.

Engerman, S. L. and Sokoloff, K. L. (2005), "The Evolution of Suffrage Institutions in the New World," *Journal of Economic History* (forthcoming).

Faini, R, J. DeMelo and K. Zimmermann (eds.) (1999), *Migration: The Controversies and the Evidence*, Cambridge: Cambridge University Press.

Ferenczi, I. and W. F. Willcox (1929), *International Migrations, Vol. I*, New York: National Bureau of Economics Research.

Goldin, C. (1994), "The Political Economy of Immigration Restriction in the United States, 1890 to 1921." In C. Goldin and G. D. Libecap (eds.), *The Regulated Economy: A Historical Approach to Political Economy,* Chicago: University of Chicago Press.

Hatton, T. J. (2000), "How Much Did Immigrant "Quality" Decline in Late Nineteenth Century America?" *Journal of Population Economics* 13, pp. 509-25.

Hatton, T. J. (2005), "Explaining Trends in UK Immigration," *Journal of Population Economics,* (forthcoming).

Hatton, T. J. and Wheatley Price, S. (2005), "Migration, Migrants and Policy in the United Kingdom," in K. F. Zimmermann (ed.) *European Migration: What Do We Know?* Oxford: Oxford University Press.

Hatton, T. J. and Williamson, J. G. (1998), *The Age of Mass Migration: An Economic Analysis,* New York: Oxford University Press.

Hatton, T. J. and Williamson, J. G. (2005), *Global Migration and the World Economy: Two Centuries of Policy and Performance*, Cambridge, Mass: MIT Press (forthcoming).

Hillman, A. L. and Weiss, A. (1999), "Beyond international factor movements: cultural preferences, endogenous policies and the migration of people: an overview," in R. Faini, J. de Melo and K. F. Zimmermann (eds.), *Migration: The Controversies and the Evidence*, Cambridge: Cambridge University Press, pp. 76-91.

Hoynes, H., Page, M. and Huff Stevens, A. (2005), "Poverty in America: Trends and Explanations," unpublished, Department of Economics, University of California, Davis (June).

Irwin, D. A. (2002), "The Early Trade Policy Experience of the United States, 1789-1820," unpublished, Department of Economics, Dartmouth College (September).

Irwin, D. A. (2005), "Antebellum Tariff Politics: Coalition Formation and Credible Commitments," Unpublished Paper: Dartmouth College.

Lindert, P. H. (2004), *Growing Public: Social Spending and Economics Growth since the Eighteenth Century,* Cambridge: Cambridge University Press.

Maddison, A. (1995), *Monitoring the World Economy 1820-1992,* Paris: OECD Development Centre Studies.

Maddison, A. (2001), *The World Economy: A Millenial Perspective,* Paris: OECD.

Markusen, J. R. (1983), "Factor Movements and Commodity Trade as Complements," *Journal of International Economics,* 13, pp. 341-356.

Mayda, A. M. (2004), "Who is Against Immigration? A Cross-Country Investigation of Individual Attitudes Towards Immigrants," IZA DP No. 1115, Bonn (April).

Mayda, A. M. and Rodrik. D. (2005), "Why are Some People (and Countries) More Protectionist than Others?" *European Economic Review,* (forthcoming).

Mitchell, B. R. (1992), *International Historical Statistics: Europe 1750-1988*, 3rd ed., New York: Stockton Press.

Mitchell, B. R. (1993), *International Historical Statistics: The Americas 1750-1988*, 2nd ed., New York: Stockton Press.

Mitchell, B. R. (2000), *International Historical Statistics: Africa, Asia and Oceania 1750-2000*, 4th ed., London: Macmillan.

Mundell, R. A. (1957), "International Trade and Factor Mobility," *American Economic Review,* 47, pp. 321-335.

OECD (2000), *Economic Outlook,* 68, Paris: OECD.

O'Rourke, K. H. (2003), "Heckscher-Ohlin Theory and Individual Attitudes Towards Globalization." Paper presented to the Eli Heckscher Celebratory Symposium, Stockholm School of Economics, May 22-24.

O'Rourke, K. H. and Sinnott, R. (2001), "What Determines Attitudes Towards Protection?" in S. M. Collins and D. Rodrik (eds.), *Brookings Trade Forum 2001,* Washington DC: Brookings Institute Press.

O'Rourke, K. H. and Sinnott, R. (2004), "The Determinants of Individual Attitudes Towards Immigration," unpublished paper, Trinity College Dublin.

Pomfret, R. (1981), *The Economic Development of Canada,* Toronto: Methuen.

Rogowski, R. (1989), *Commerce and Coalitions: How Trade Affects Domestic Political Alignments,* Princeton, NJ: Princeton University Press.

Smith, J. P. and Edmonston, B. (eds.) (1997), *The New Americans: Economic, Demographic and Fiscal Effects of Immigration,* Washington D.C: National Academy Press.

Timmer, A. and Williamson, J. G. (1998), "Immigration Policy Prior to the 1930s:

Markets, Policy Interactions, and Globalization Backlash," *Population and Development Review,* 24, pp. 739-771.

United Nations (2002), *International Migration Report 2002,* New York: United Nations.

Wellisch, D. and Walz, U. (1998), "Why do Rich Countries prefer Free Trade over Free Migration? The Role of the Modern Welfare State," *European Economic Review*, 42, pp. 1592-1612.

Williamson, J. G. (2004), *The Political Economy of World Mass Migration: Comparing Two Global Centuries*, Washington, D.C.: American Enterprise Institute Press.

Williamson, J. G. (2005a), "Explaining World Tariffs 1870-1938: Stolper-Samuelson, Strategic Tariffs and State Revenues." In R. Findlay, R. Henriksson, H. Lindgren and M. Lundahl (eds.), *Eli F. Heckscher, 1879-1952: A Celebratory Symposium*, Cambridge, Mass.: MIT Press (forthcoming).

Williamson, J. G. (2005b), *Globalization and the Poor Periphery Before the Modern Era: The Ohlin Lectures,* Cambridge, Mass.: MIT Press (forthcoming).

**Table 1**
**Government Immigration Policies, 1976-2001**
(Percent of governments aiming to restrict immigration)

| Year | 1976 | 1986 | 1996 | 2001 |
|---|---|---|---|---|
| All Countries | 7 | 20 | 40 | 40 |
| More Developed Countries | 18 | 38 | 60 | 44 |
| Less Developed Countries | 3 | 15 | 34 | 39 |

Source: United Nations (2002), p. 18.

**Table 2**
**GDP Per Capita Ratio: Average Source Country/Destination Country**

| Country | 1860s | 1870s | 1880s | 1890s | 1900s |
|---|---|---|---|---|---|
| US | 95.4 | 92.3 | 73.3 | 64.0 | 49.5 |
| Canada | 154.8 | 183.1 | 159.4 | 136.7 | 107.0 |
| Argentina | 114.2 | 110.2 | 89.8 | 68.4 | 54.6 |
| | | | | | |
| Country | 1950s | 1960s | 1970s | 1980s | 1990s |
| US | 49.1 | 40.8 | 29.8 | 24.0 | 22.4 |
| Canada | 64.5 | 60.0 | 40.8 | 33.7 | 30.8 |
| Australia | 73.4 | 75.4 | 64.5 | 55.5 | 49.0 |
| Germany | 95.6 | 70.1 | 61.1 | 51.1 | 44.7 |
| UK | -- | -- | 75.3 | 83.1 | 86.2 |

*Notes:* Immigration weights by source country are constructed from data on annual gross immigration flows, summed by decade, where immigrants are classified by country of birth or last residence and where those not classified are allocated to a residual group for each world region. These weights are applied to the mid-decade estimate of GDP per capita at constant purchasing power parity for individual countries or country groups.
*Sources* : 1860s to 1900s: weights for gross immigration from Ferenczi and Willcox (1929), Table 14, pp. 274-87, by country with residuals by continent; GDP per capita from Maddison (1995), Appendix D, pp. 194-206 (by country) and Appendix E, pp. 212 (by broad region), with interpolations where necessary. Cross-border migration between the US and Canada is excluded from the migration weights.  1950s to 1990s: weights for gross immigration, for the US from US Immigration and Naturalization Service (2002) Table 2 at http://uscis.gov/graphics/shared/aboutus/statistics/Immigs.htm; for Canada immigration data to 1979 kindly supplied by Don DeVoretz and for 1980-2000 by Roger Bourque (Statistics Canada); for Australia from DIMIA (2001) http://www.immi.gov.au/statistics/publications/federation/body.pdf; for Germany data kindly supplied by Georgios Tassoukis; for the UK from the dataset used in Hatton (2005). Weights exclude cross border migrants between the US and Canada and between the UK and Ireland; for Germany they exclude flows of ethnic German *ausseidler*.   GDP per capita for countries and regional residuals from Maddison (2001) Appendix C, pp. 267-333.

**Table 3**
**Share of Customs Revenue in Total Tax Revenue, 1840s-1970s**

| | 1840s | 1850s | 1860s | 1870s | 1880s | 1890s | 1900s | 1910s | 1920s | 1930s | 1950s | 1960s | 1970s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| European Leaders | | | | | | | | | | | | | |
| UK | 41.1 | 36.3 | 32.8 | 26.6 | 22.4 | 19.4 | 21.4 | 14.9 | 12.9 | 21.1 | | | |
| France | | 10.7 | 6.8 | 6.3 | 10.2 | 12.0 | 12.0 | 17.0 | 8.1 | 15.5 | 9.3 | 11.0 | 7.3 |
| Germany | | | | 46.4 | 55.7 | 54.9 | 53.3 | 33.3 | 12.3 | 14.2 | 4.6 | 3.6 | 1.6 |
| Labor-scarce Countries | | | | | | | | | | | | | |
| Australia | | 90.0 | 92.2 | 91.3 | 83.0 | 78.2 | 64.2 | 44.7 | 37.4 | 31.3 | 7.7 | 5.7 | 5.1 |
| N. Zealand | | | 42.5 | 38.8 | 35.7 | 36.2 | 34.5 | 23.8 | 28.2 | 25.5 | 13.9 | 9.7 | 3.9 |
| US | 87.8 | 90.3 | 56.6 | 52.1 | 56.3 | 48.1 | 47.1 | 31.4 | 12.4 | 10.8 | 0.9 | 1.2 | 1.4 |
| Canada | | | | 58.4 | 60.3 | 54.3 | 56.8 | 57.7 | 33.8 | 22.2 | 9.2 | 7.7 | 6.0 |
| Argentina | | | | | | 60.7 | 49.9 | 46.6 | 48.8 | 33.8 | | | |
| Brazil | | | | | | | 52.3 | 46.6 | 37.9 | 32.4 | | | |
| Chile | | | | | | 69.1 | 89.4 | 43.4 | 63.0 | 41.2 | | | |
| Uruguay | | | | | | 58.9 | 54.9 | 79.7 | 37.7 | 39.6 | | | |

*Sources:* UK, France Germany from Mitchell (1992) pp. 806-33; Australia from Barnard (1986) pp.38-41, New Zealand from Mitchell (2000) pp. 932-4; US, Canada, Argentina, Brazil and Uruguay from Mitchell (1993) pp. 668-85. The UK series is not reported for the 1950s-1970s since excise is aggregated with customs in the official data, and excise is much bigger.

**Table 4**
**Welfare Dependency and Personal Characteristics in the EU 1994-6**
(differences between immigrants and EU nationals)

| Country | Percentage point difference between immigrants and EU nationals in receipt of | | | Difference in characteristics between immigrants and EU nationals | | | |
|---|---|---|---|---|---|---|---|
| | Unemp. Benefit | Family Benefit | Pensions | Low educated | High educated | Age (years) | No. of children |
| Germany | 1.6 | -- | -- | 21.2 | −5.5 | −8.6 | 0.54 |
| Denmark | 24.5 | 5.3 | −17.9 | 14.7 | 0.6 | −7.8 | 0.47 |
| Netherlands | 7.0 | 7.9 | −14.9 | 22.7 | 5.3 | −7.7 | 0.65 |
| Belgium | 6.7 | 1.1 | −6.1 | 10.6 | −14.1 | −2.5 | 0.12 |
| France | 4.9 | 16.7 | −12.8 | 22.5 | −7.2 | −3.6 | 1.10 |
| UK | 0.6 | 0.6 | −23.4 | −15.4 | 21.2 | −8.7 | 0.85 |
| Austria | 8.9 | 8.1 | −18.0 | 7.8 | 12.2 | −10.6 | 0.35 |
| Finland | 31.7 | 0.2 | −12.7 | −12.3 | 17.5 | −7.4 | 0.04 |

*Source:* Boeri et al. (2002: 74-5).
*Notes:* Data for those aged 16 and above are from the European Community Household Panel. The first three columns refer to differences between non-EU citizens and EU citizens in the percentage receiving benefit. The next two columns are differences in the percentage with less than completed secondary school education and the percentage with college degrees. The penultimate column refers to those adults in older age groups, and the last column refers number of children per household.

**Table 5**
**Attitudes Towards Immigration and Trade, 1995/6**

| Country | Anti-Immigration opinion | Anti-Imports opinion | Correlation coefficient | No of observations |
|---|---|---|---|---|
| Australia | 3.768 | 3.999 | 0.271 | 2318 |
| Austria | 3.808 | 3.907 | 0.267 | 923 |
| Canada | 3.311 | 3.292 | 0.284 | 1310 |
| Germany | 4.270 | 3.283 | 0.370 | 1630 |
| Great Britain | 4.060 | 3.772 | 0.325 | 955 |
| Ireland | 3.073 | 3.664 | 0.178 | 919 |
| Italy | 4.148 | 3.599 | 0.243 | 1020 |
| Japan | 3.373 | 2.939 | 0.219 | 1000 |
| Netherlands | 3.822 | 2.930 | 0.272 | 1864 |
| New Zealand | 3.737 | 3.401 | 0.310 | 950 |
| Norway | 3.845 | 3.146 | 0.240 | 1333 |
| Spain | 3.385 | 3.889 | 0.180 | 1014 |
| Sweden | 3.970 | 3.254 | 0.253 | 1132 |
| USA | 3.880 | 3.765 | 0.249 | 1090 |
| All countries | 3.770 | 3.480 | 0.237 | 17458 |

*Source:* Based on data from the 1995 International Social Survey (ISSP) module on national identity, details at http://www.gesis.org/en/data_service/issp/data/1995_National_Identity.htm. These figures are the average attitude towards immigration and imports on a five point scale where respondents were asked whether the number of immigrants/imports into their economy should increased a lot (1), increased a little (2), kept the same (3), reduced a little (4), or reduced a lot (5). The sample used here excludes cases where, for either immigration opinion or trade opinion, there was a non-response or where the response was 'don't know'.

**Table 6**
**The Determinants of Anti-Imports and Anti-Immigration Attitudes**

| Explanatory Variable | (1) Anti-Immigration Opinion | (2) Anti-Imports Opinion |
|---|---|---|
| *Individual-level variables* | | |
| 'Patriotism' | 0.055 (1.81) | 0.201 (7.39) |
| 'Chauvinism' | 0.374 (8.23) | 0.397 (13.7) |
| Foreign-born | -0.035 (0.32) | -0.130 (1.99) |
| 2$^{nd}$ Generation Immigrant | -0.283 (6.21) | 0.085 (2.11) |
| Female | 0.035 (1.13) | 0.304 (11.3) |
| Age/100 | 0.009 (0.07) | -0.001 (1.08) |
| Married | 0.038 (1.77) | 0.029 (1.40) |
| Highly Educated | -0.219 (7.13) | -0.280 (7.32) |
| Employed | -0.008 (0.51) | -0.032 (1.07) |
| *Country-level variables* | | |
| Log GDP Per Capita | 0.692 (2.58) | -0.294 (0.57) |
| Inequality | 1.850 (2.26) | 4.043 (2.23) |
| Log Population | 0.077 (1.51) | -0.072 (0.64) |
| Welfare Expenditure /GDP | 0.047 (7.26) | |
| Share of Popn Foreign | 0.044 (3.13) | |
| Imports/GDP | | 0.006 (0.28) |
| OECD Trade/GDP | | -0.009 (0.93) |
| $R^2$ | 0.207 | 0.219 |
| No of obs | 14820 | 14820 |

*Notes*: The countries included are those listed in Table 5 above. The number of observations is reduced due to missing data for some of the individual level explanatory variables. t-statistics in parentheses are from robust standard errors clustered by country.

*Sources*: ISSP survey as Table 5 above. Sources for the country-specific variables are as follows. Population and Real GDP Per Capita at constant 1996 US dollars, purchasing power parity adjusted, from A. Heston, R. Summers and B. Aten, Penn World Table Version 6.1, Center for International Comparisons at the University of Pennsylvania (CICUP), October 2002:
http://pwt.econ.upenn.edu/php_site/pwt61_form.php.
For inequality, gini coefficients are taken from the World Bank's World Development Indicators, 2003, Table 2.8 p. 64-66 at: http://www.worldbank.org/data/wdi2000/pdfs/tab2_8.pdf. Welfare expenditure/GDP, Imports/GDP and OECD Trade/GDP are from the World Bank's Global Development Network databases (Government Finance and Macro Time Series) at:
http://www.worldbank.org/research/growth/GDNdata.htm. The share of foreign nationals in the population is taken from the Council of Europe's Demographic Yearbook, 2001, at:
http://www.coe.int/t/e/social_cohesion/population/demographic_year_book/2001_Edition/default.asp, and for non-European countries from Migration Information Source at: http://www.migrationinformation.org/. The figures for countries for which only foreign-born numbers are available (as distinct from foreign nationals), were adjusted downwards accordingly. All the variables are for 1995 or the closest year available.

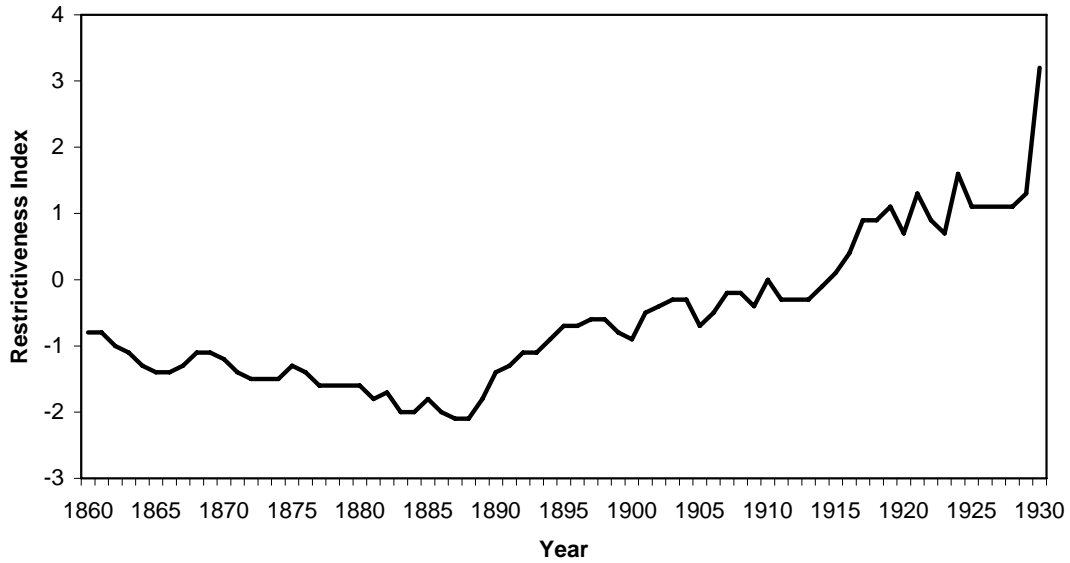**Figure 1**
**Average Tariff, 35 countries 1870-1998**
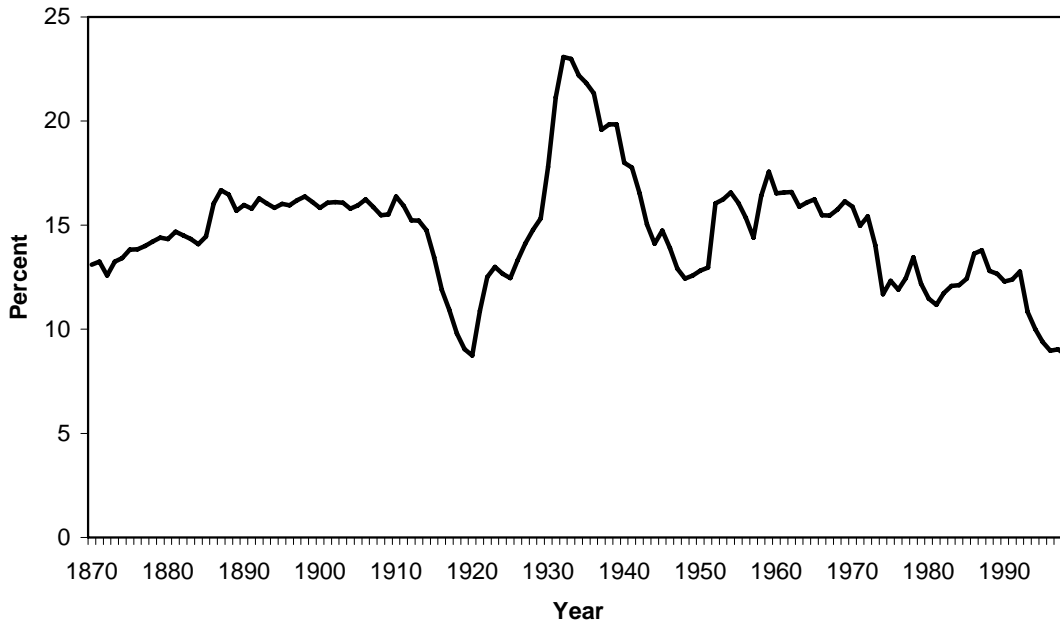


Source: Williamson (2005a).

**Figure 2**
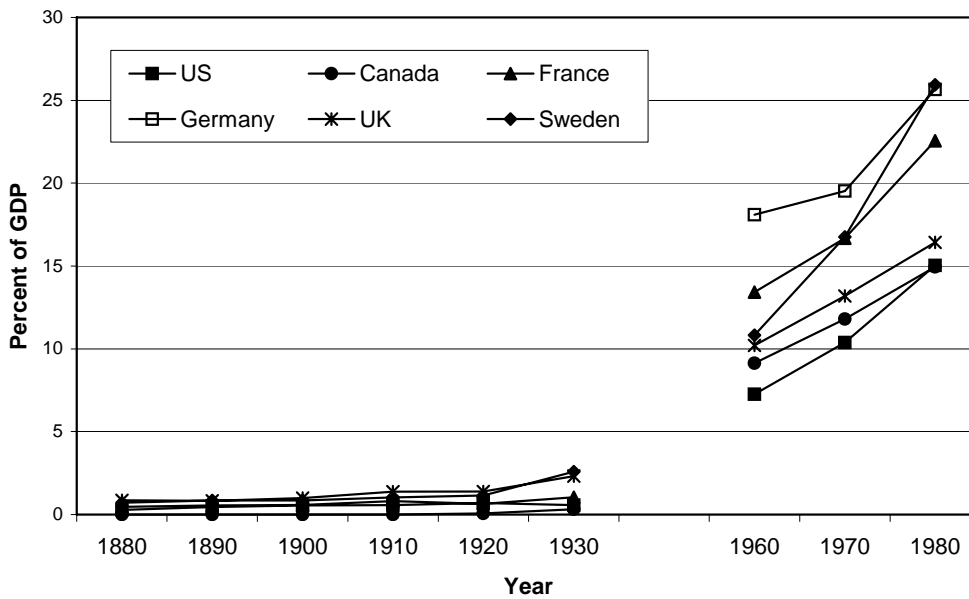**Unweighted Average of Average Tariffs Before World War 2**
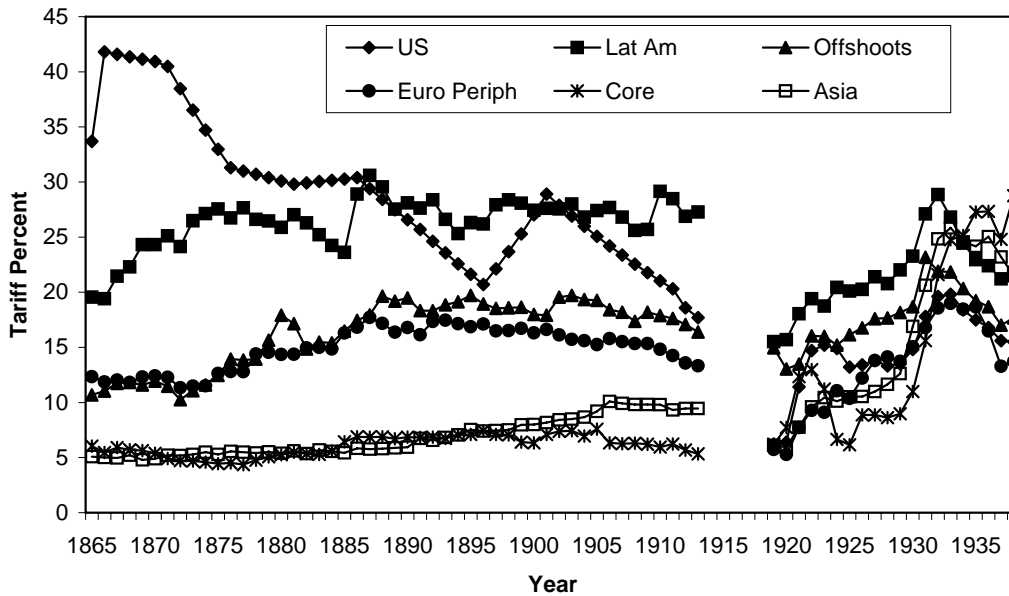


Source: Williamson (2005a).

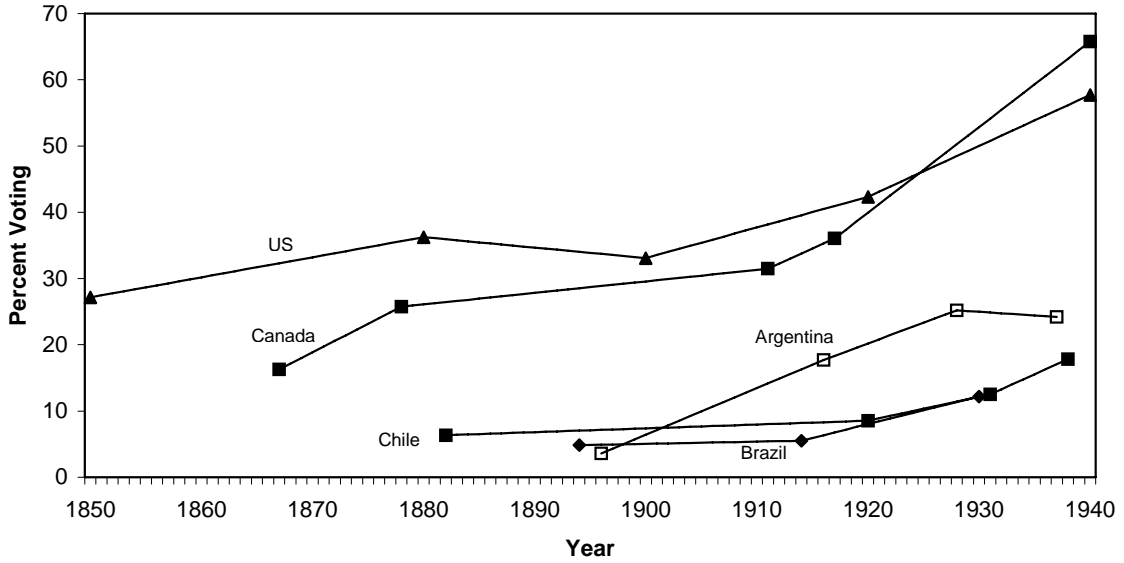**Figure 3**
**New World Immigration Policy Index 1860-1913**

**Figure 4**
**Welfare State Spending 1880-1980**

**Figure 5**
**Percent of Adults Voting: New World, 1850-1940**



*Source*: Data from Engerman and Sokoloff (2005) kindly supplied by Ken Sokoloff.

**Figure 6**
**Percent of Adults Voting: Europe, 1850-1940**
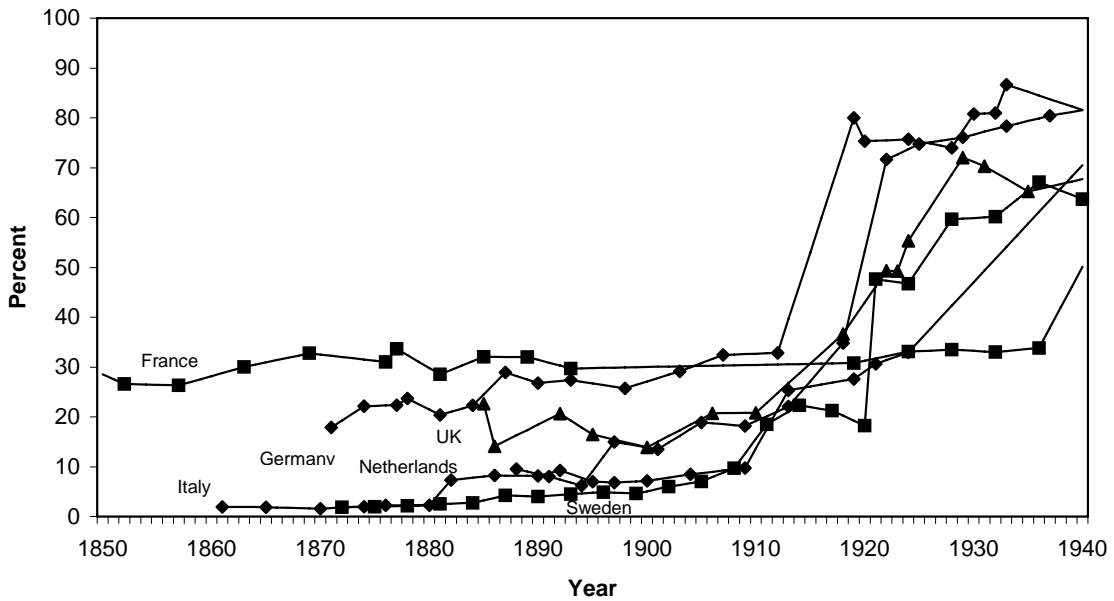


*Source*: Data from Aidt et al. (2005) kindly supplied by Toke Aidt.

**Figure 7**
**The Response of Public Opinion to Immigrants and Imports**