MAKING SENSE OF IMMIGRATION POLICY: ARGENTINA, 1870-1930

Blanca Sánchez-Alonso

Abstract
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Keywords: immigration policy, Argentina, political economy, international migration.

JEL Classification: N4, N36, J61, O24

Blanca Sánchez-Alonso: Department of Economic Theory and History, Universidad San Pablo-CEU (Julián Romea, 23, 28003 Madrid, Spain) and Instituto Figuerola.
Email: blanca@ceu.es

UNIVERSIDAD CARLOS III DE MADRID • c/ Madrid 126 • 28903 Getafe (Spain)• Tel: (34) 91 624 96 37
Site: http://www.uc3m.es/uc3m/dpto/HISEC/working_papers/working_papers_general.html
Abstract

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Immigration policy during the age of mass migration evolved from a more or less general open door policy around the 1860s to a final closing down during First World War and the 1920s, with rising barriers to international migration since the late nineteenth century. Market forces were important in this policy shift as labour became more abundant in the New World, real wage growth slowed down, and income distribution differences widened. Political variables played also a role in shaping national immigration policies as a result of nation building, interest groups and more or less representative politics.

This paper focus on Argentina since it is a relevant case study among New World countries before 1930. Argentina was only second to the United States in number of immigrants and in no other country had immigration such an impact compared to the size of native population. The ability of Argentina to attract large numbers of immigrants relative to their own population is striking not only in the Latin American context but also compared to Australia or Canada.\(^1\) The conventional representation found in Argentine history is that, in spite of a growing concern about immigration, policy did not change substantially from the 1890s to the 1930s. The government subsidized European immigration for a very short period of time in the late 1880s but over the period considered immigrants arrived in massive numbers with no subsidy. On the eve of the Great War, the government approved legal restrictions of entry for those considered politically dangerous such as anarchists, but historians maintain that the country remained open to international migration all over the period. Economic historians, however, maintain that Argentina followed the general trend of the gradual closing of New World countries after the 1870s. The United States led the leap in restrictions but Argentina was no exception. According to this view, around 1900 immigration policy had switched and Argentina is represented as a restrictionist country in the following period (Timmer and Williamson 1998).

This paper argues that pro-immigration policy was a strong and persistent long-run force in Argentina but simultaneously there was a retreat from a totally open policy in the 1870s to mild restrictions during the 1920s. The closing trend may have been similar to that of the United States but not the level of restrictions. Different forces were pushing in opposite directions: there were economic reasons to impose restrictions to massive immigration but the balance of political power in hands of those more benefited by the influx of foreign labour kept restrictions moderate. The aim of this paper is, therefore, to disentangle the different forces shaping Argentine immigration policy from 1870 to 1930. If there was an economic

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1 Regarding immigration policy, Canada and Australia had a special relation with Imperial Britain; in addition, Canada was too close to the US, while Australia was too far from Europe and had to subsidize the cost of the passage (Magee and Thompson 2010: 72-78). Brazil developed a very particular immigration policy with generous subsidies to foreign workers after the abolition of slavery.
rationality for closing the door to large numbers of immigrants, why did Argentina not follow the United States during the 1920s? If, on the contrary, Argentina was a classical case of a country dominated by pro-immigration policy interests (i.e. landed proprietors), why did restrictions to immigration increase over time?

Section 1 summarizes the standard views found in the literature regarding Argentinean immigration policy. A carefully constructed new index of immigration policy based on detailed legislation is presented. Quantifying policy is a difficult task and there is always room for discussion since no theoretical model can be followed. Therefore, section 2 discusses different theoretical explanations for immigration restrictions trying to find out how they fit in the Argentinean historical experience. Section 3 adds a political economy explanation of the evolution of immigration policy. Then, in section 4 the quantitative relationship between the new immigration policy index and some variables intended to capture different forces influencing policy is explored. Finally section 5 concludes.

The quantitative evidence presented here suggests that Argentina had several economic reasons to restrict immigration prior to the 1930s, particularly rising inequality and a declining demand for labour as population and the economy grew. However, economic forces pushing for restriction were not successful in closing the door during the 1920s and immigration policy never turned to measures similar to those approved in the United States. In a completely different institutional background Argentinean policy makers were dominated by pro-immigration interest. Unskilled labour force was composed overwhelmingly by foreign workers who could not participate in politics; they formed a *de facto* powerful political power with unskilled native workers (which in turn had very low electoral participation rates) and developed a very radical labour movement. Therefore, those hurt most by massive immigration could not change policy in parliament. However, their voice was heard loudly through massive strikes and labour unrest. It was the fear of political and social turmoil the ultimate reason for which those who controlled parliament and had more to gain with an abundant supply of labour eventually introduced immigration restrictions.

1. Open or closed? Two views on Argentinean immigration policy

Argentina is traditionally represented in the literature as a country open to mass immigration up to the 1930s. Argentina competed with Brazil (and to a certain extent with the United States) for immigrants from the same Southern European pool and, contrary to Canada or Australia, immigration policy was not restrictive. The standard view is that despite an
increase in some regulation of arrivals during the 20th century, Argentina had a de facto open door policy which pulled masses of immigrants.

 Scholars agree that there was an increase in regulations on the conditions of entry, but legislation remained basically untouched since the 1870s. Classic assessments on economic growth in Argentina before the Great War stressed the role of liberal policies towards trade and migration and the openness of Argentina to capital and labour during the Belle Époque (Díaz Alejandro 1970). Historians emphasize the fact that liberal policy remained almost unchanged despite many attempts to restrict the immigration flow and all the official rhetoric on the need to select high quality immigrants (Devoto 2001; 2003b). Taylor (1992; 1994) elaborated on the reasons of Argentina’s relative economic decline compared to Australia: different migratory policies (selective in Australia versus non-selective in Argentina) attracted different types of immigrants and had long run economic and demographic consequences. 2 Others claimed that immigration policy in Argentina was irrational and short-sighted because of the absence of restrictions (Solberg 1970). The persistence of an open immigration policy in Southern Cone countries is commonly explained as a result of the political power in hands of the latifundistas and urban capitalists, while in the United States complaints from the median voter (the unskilled or semiskilled worker in an urban occupation) finally resulted in a restrictions to immigration (Hatton and Williamson 2007: 220-30).

 In Argentina the need to increase population to exploit the abundant natural resources was a strong element in the national building process. The 1853 Constitution established a long lasting legal framework entirely friendly to European immigration. 3 According to the Constitution and the following legislation (the 1876 Law of Immigration and Colonization) foreigners enjoyed basic civil rights as freedom of association, movement, private property, profession and religion, among others. Immigrants were exempted from compulsory military service and they could vote in municipal elections. Naturalization was easy and with low requirements (Castro 1991).

 At the turn of the twentieth century ideas about the positive influence of immigrants had changed. Foreigners arrived in huge numbers; they crowded in the cities and some of them became a threat to social order when they turned to be very influential in the radical labour movement. Since immigrants kept their nationalities of origin, a strong nationalistic

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2 Taylor urged further research on the dramatic implications for long run economic growth of the open door immigration policy followed by Argentina.

3 Population was needed not only to people the Pampa and promote economic growth, but immigration had also the original goal of bringing culturally “superior” immigrants to “civilize” the country. Argentina never instituted discriminatory policies against particular foreign group (as the United States did with the Chinese) but always show a positive preference for European immigrants (Cook Martin and Fitzgerald 2010). Europeans were considered in the early years of massive immigration superior workers than native population (Solberg 1970).
ideology developed in Argentina around the 1910s stressing the belief that foreigners poorly assimilated national values. Nevertheless, immigration policy proved very difficult to change. Between 1899 and 1923 three bills and thirty-six proposals initiated by members of Parliament failed to change the old 1876 Law. On the eve of the Great Depression the government had managed to introduce mild restrictions and more administrative controls on arrivals (particularly for those considered politically dangerous such as anarchists) but scholars concur with the view that Argentina kept a liberal immigration policy up to the early 1930s (Albarracín 2004).

This traditional representation of Argentina as a country open to immigration conflicts directly with other explanations of the evolution of immigration policy in the global labour market. In a very influential article Timmer and Williamson (1998) hold that immigrant countries in the New World started closing the doors to foreign workers already in the late nineteenth century. The United States did not suddenly close the door during the 1920s; restrictions had been cumulating over a longer period. Argentina, Australia, Canada, and Brazil, followed the same trend. The massive movement of labour force across the Atlantic caused a reaction against unrestricted immigration. Those more hurt by immigration, the unskilled native-born, gradually increased their political influence and finally managed to change policy. In Latin America, policies often took the form of an enormous drop in (or even the disappearance) of large immigrant subsidies rather than of outright exclusion. Therefore, economic historians seem to agree that Argentina, following a global trend, became a country increasingly closed to massive immigration.

Timmer and Williamson (1998), (hereafter T&W), designed an immigration policy index for five countries in New World destinations: Argentina, Australia, Brazil, Canada and the United States. The index was coded for each country with values from +5 to -5. A positive score indicates a set of policies strongly pro-immigration; a negative score reflects policies strongly anti-immigration, and zero score reflects a neutral policy, a mixture where pro-immigration offset anti-immigration policies. According to the values in T&W index, Argentina was a restrictionist country from the late 1890s onwards (even with lower values than Australia!) and very much in line with the United States values up to 1914. In spite of a very different experience with mass immigration and the fact that no other country had a higher political participation than the United States (i.e. the working man competing with

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5 Contemporaries shared the same view; Cuban officials in 1930 consider legislation in Argentina as “an example of a nation that marches at the head of the people that favour the immigrant”. Quoted in Cook Martin and Fitzgerald (2010).
immigrants had political voice), the two countries experience a very similar drift away from free immigration.

Since this representation conflicts directly with the conventional view the question is whether the T&W index for Argentina misinterpret immigration policy. To help answer this question I have designed a new index (hereafter BSA index) carefully grounded on Argentine legislation on immigration. The new index tries to measure the intentions of immigration policy as viewed by the government in the host country and not by prospective immigrants. Values in the BSA index range from 0 to 10, the latter being a totally open immigration policy (see appendix A). Figure 1 presents the two indices. Both show the same trend in the long run: Argentine policy became more restrictive. The BSA index shows nonetheless a milder restrictive profile: before World War I there was a moderate retreat from openness and during the 1920s restrictions increased. The largest discrepancy between the two indices appears in the 1890s. T&W considered that the sudden disappearance of large immigrant subsidies after 1890 should be depicted as a major anti-immigration policy shift. Consequently, their index drops sharply: a 3 points fall. The BSA index, on the contrary, considers that the disappearance of subsidies to European migrants was neither the result of any deliberate intention to close the door nor the response to any pressure from native population or any particular social group against massive immigration. The end of subsidies was a result of the 1890 financial crisis. Argentina had started subsidising immigration from Europe in the late 1880s. The subsidies policy was short lived, just over the years 1887-1889. The financial crisis of 1890 (the Baring crisis) left the government with no funds and the subsidies programme was completely abolished in 1891. The reason the programme ended was the government financial hardship and not a deliberate decision to restrict immigration. Thus, the BSA index shows a moderate drop after 1890. Due to the short duration of the subsidies program the impact in total immigration was very small. Fewer than 2 percent of the 6.5 million immigrants who arrived to Argentina between 1840 and 1930 did so taking advantage of government paid fares. After the 1890s crisis, the government rejected resuming the subsidies programme not because there were any anti-immigration reactions but simply because immigrants arrived in large numbers without any official help (Devoto 2003). The

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6 Brazil started subsidizing immigration in the same years so it was not by chance that the Argentine government thought that they were unable to compete for European workers. In addition, the government tried to attract Northern Europeans to balance the predominance of Italian immigration (Sánchez-Alonso 2007)

7 It is true that the disappearance of subsidies was likely to directly affect the costs and benefits of migration as viewed by the prospective immigrant but it should be bear in mind that the new index intends to measure intentions of immigrant policy from the point of view of the Argentine government.

8 Brazil kept a long lasting program of subsidised immigration and over 70 % of immigrants arrived with paid passages (Leff 1997; Holloway 1980). Australia had an assisted migration programme all over the period, more or less generous according to economic conditions at home: 50 percent of arrivals in the 1870s were assisted but only 10 percent in the crisis years of the 1890s.
disappearance of subsidies was simultaneously counterbalanced with a substantial increase in the number of consulates in several countries in Europe (Cook Martin 2005). The Argentine government quickly learned that it was possible to attract labour without subsidising the trip from Europe: high wages, high demand for unskilled labour, and lower transportation cost over the long run did all the work.

The BSA index shows other minor discrepancies for the period 1900-1914 (see appendix 1). Scholars consider the 1902 Residence Law and the 1910 Law of Social Defence as anti-immigration legislation since it allowed the executive to deport foreigners involved in political activities. It is not easy to classify this legislation as a simple anti-immigration policy (see section 3 for explanation). Nevertheless, following the conventional approach, the new index presents lower values. The most serious attempt to introduce a restrictive legislation substituting the old 1876 Law came in 1923 when the government presented a bill to Parliament very similar to the 1921 American Immigration Act (although with no national quotas) and clearly under the American influence. The bill was rejected and the government finally enacted an administrative decree modifying in a restrictive way the old 1876 Law.

The 1923 decree gave immigration officials extraordinary faculties to decide who was admitted and, according to Devoto (2001), they were slack in the application of the requisites for entry. Economic growth in the last years of the 1920s seems to be the explanation for this very flexible immigration control.

To sum up, the new index presents a very similar trend in the evolution of immigration policy in Argentina as the T&W index, but the overall picture is one of a much milder restrictions throughout. The disappearance of subsidies did not represent a major anti-immigration policy shift, but rather government financial constraints after the Baring crisis. Argentina did not follow the lead of the United States after the Great War and, in comparative terms, kept relatively low barriers of entry for European immigrants. Globalization forces may explain the trend in immigration openness, but not necessarily the level of restrictions prior to the 1930s.

9In the early 1880s, there were 35 consular offices in Spain alone. By 1904, there were 56 consular offices in Spain. This number dropped after the Great War, but in 1933 there were still 42 consular offices in Spain. Similarly, by 1895 Argentina had 30 consular offices in Italy. By 1910, this number had increased to 42 and by 1933 there were about 25 offices. In no other European countries did Argentina have as many consular offices, with the exception of Britain (source of much capital investment).

10American congress passed legislation in 1903 and 1907 excluding from entrance into the country immigrants who held anarchist beliefs. In 1908 immigration officials were instructed “to rid the country [through deportation] of alien anarchists and criminals” (Jensen 2001:34). Timmer and Williamson (1996) did not consider this legislation as immigration restrictions.

11Modifying the Law by administrative decrees was the norm of Argentina immigration legislation. The 1876 Law of Immigration and Colonization remained in force until the passage of Law 22439 in 1981 (Albarracín 2004:173)
It is worth stressing that any attempt to capture policy changes in a quantitative index is subject to judgment differences in assigning values since there is no underlying model or theory. In order to make sense of Argentine immigration policy, the next section will try to answer the following questions: Is there a rational explanation for an increase in immigration restrictions over time? Were there economic fundamentals explaining the evolution of immigration policy? Was the Argentine government trying to maintain the position of unskilled labour relative to that of landowners or industrialists? How do we explain the increase of restrictions since Argentine politics were dominated by big landowners and capitalist? Did immigrant origin or quality change over time generating a demand for restrictions? Why Argentina did not follow the United States in closing the doors during the 1920?

2. What explains immigration restrictions? Some hypotheses for Argentina

Three classical studies analyze changes in immigration policy prior to the 1930s over time and across countries: Foreman-Peck (1992), Goldin (1994), and the aforementioned Timmer and Williamson (1998). Their basic findings in explaining the restrictions increase are the following: (1) Unskilled workers are those most hurt by mass immigration; (2) Unemployment increased the demand to close the door; (3) Too many immigrants can raise hostile reactions from the native-born population; (4) Changes in immigrants’ origin may be related to lower quality of immigrants and/or to an increase in xenophobia for different reasons (culture, religion…); (5) An increase in inequality might provoke more restrictions, and (6) Political institutions and the extension of suffrage shape immigration policy in one way or the other. How do these explanations fit in the Argentine case?

Unskilled workers are those most hurt by mass immigration: “quality” of immigrants is important to explain different policies.

There is a clear consensus in the literature regarding the divided interest between labour and capital: wage earners, particularly unskilled workers, lose with immigration as the labour force grows and wages decrease, while owners of land and capital (also owners of skills) gain from the more abundant labour supply. A significant negative impact of immigration on wages is found in the United States (Goldin 1994; Hatton and Williamson 1998). If, however, labour demand augments enough to offset the immigration impact on
labour supply, it might be the case that wages do not decrease (or in a very small proportion) as a result of massive immigration.\footnote{This seems to be the case in Australia where wages actually increased with immigration (Pope and Withers 1994)}

Real wages in Argentina grew substantially from 1870 to 1930 as labour demand was expanding. Thanks to the work done by Jeffrey Williamson (1999) we can now document real wages in several Latin American countries on a yearly basis. In the 1870’s real wages in Argentina were around 76 percent relative to Britain. In the first decade of the twentieth century Argentine wages were 96 percent those in Britain. Nevertheless, immigration had the predicted effect on real wages of the native population. In a counterfactual scenario of no immigration between 1870 and 1910, Argentine real wages would have been 21 percent higher (Taylor and Williamson 1997). The impact of migration on the Argentine labour force is the highest among the New World countries given the small size of population around the 1870s. Over time, demand for restrictions might have grown among native-born workers competing with immigrants. In the United States the increase in industrial real wages during the 1920s was directly related to the end of mass migration from Europe after the introduction of the Quotas (David and Wright 1999). Therefore, we can assume that had Argentina introduced restrictive policies similar to those in the United States the growth of real wages during the 1920s would presumably have been higher.

A further consideration is whether immigrants are complementary or substitute labour force. More unskilled immigrants might increase the skill premium on wages of the local labour force; therefore, the reaction of native workers to restrictions might be different according to the immigrants’ and their own skills. The traditional view assumes that Argentina received masses of unskilled workers from Southern Europe. The majority of the native labour force was also unskilled. However, skills increased over time both in Southern Europe and in Argentina, so in order to understand the reaction of native workers to immigrant labour we should think in relative terms. Competition in the labour market between natives and immigrants is, therefore, related to the “quality” of the immigrants both in absolute and in relative terms.

“Quality” of immigrants is usually proxied by wages and literacy rates. Literacy in countries of origin of immigrants and relative rates of literacy between origin and destination allow testing the evolution over time of immigrant’s quality. For the United States, it has been argued that the switch of emigrant sources from high-wage to low-wage European countries correlates with a decrease in the quality of immigrants; the Dillingham Commission reached that conclusion before 1914. Change in immigrants’ origins was related to a drop in quality
and, consequently, to an increase in the demand for restrictions. In the case of Argentina there is no dramatic change in source countries over time (Figure 2). Before 1914 national origins of immigrants were broadly the same (though there was a decrease in the already low numbers of immigrants from Northern Europe and an increase of other groups from Eastern Europe around World War I). Italians and Spaniards, in larger proportions the former, were systematically more than 70 per cent of the migration flow. Immigration from Northern European countries (Ireland, France, Germany, Switzerland) declined over time, Eastern Europeans (Russia mainly) reached quite substantial numbers before First World War, and new groups such as people from the former Ottoman Empire, appeared in the 1920s. So, the question would be if there was a decreasing trend in the quality of Latin immigrants (Spaniards and Italians) over time.

Literacy rates were lower in Southern Europe compared to the North, but there was a general upward trend in literacy from the 1870s to the 1930s and the rise was particularly intense in the 1920s. Immigrants from Italy and Spain were more literate in the 1910s and the 1920s than in 1870 simply because of the growing literacy rates in their countries of origin. Low levels of literacy and skills might have been the case for new immigrants, such as those coming from the Middle East. Argentinean immigration statistics show 42 per cent of illiterates among newly arrived immigrants in the year 1914. In the 1920s illiteracy rates among immigrants dropped to 18 percent in spite of the higher numbers of “new immigrants”.

What happened in relative terms? In 1884 primary education became compulsory, secular and free as education became a priority for the Argentine government. Massive immigration and the growing number of foreign schools gave the definite push to use primary education to transmit national values to the child of immigrants and to reinforce national cohesion. There was a dramatic rise in literacy since the late 19th century. Literacy rates increased from 36.8 percent in the 1880s to 71.3 per cent in the 1920s (Bunge 1940). In the city of Buenos Aires the 1914 census shows that 80 percent of population older than 14 were literate.

The extraordinary growth in literacy rates of resident population in spite of the massive inflow of immigrants seems to support the idea that Argentina opted for raising the levels of education of the immigrant’s children instead of restricting the flow of low quality immigrants. Natives and second generations of immigrants became more literate than their foreign parents so immigrants relative quality decreased in the long run. The trend was also reinforced by the declining numbers of highly literate immigrants from Northern Europe over time (Figure 3). At the turn of the century, the image of native workers was vindicated at the expense of the Europeans. During the next decade many intellectuals came to agree that
Argentine immigrants were generally of low quality (Solberg 1970:152). Alejandro Bunge wrote in 1914 that “our immigration barely possessed the minimum capacity and knowledge that one might expect of civilized men”. Argentine government and Parliament, however, refused to approve any change in policy in order to select high quality immigrants.13

It can be argued that in spite of the official rhetoric the quality of immigrants never worried in Argentina as much as in the United States. The 1917 Literacy Test in the United States might have shown the path (Australia had a dictation test since 1901). Both the Literacy Test and the Quotas established in the United States aimed against the “low quality” (less skilled) immigrants from Southern and Eastern Europe. If a literacy test would have been passed in Argentina after the War and illiterate people impeded to enter the country, the flow would have been 21 percent lower in 1923-1927. In 1914, a year of massive arrivals, imposing a literacy test would have decreased immigration to Argentina by 42 percent.14 The impact would have been slightly higher than in the United States where the literacy test would have reduced the number of all new immigrant groups by 37.4 percent in 1907 at the height of immigration (Goldin 1994). The debate about the quality of immigrants was present in political and intellectual circles but it was never translated into selective policies.

Unemployment increases the demand to close the door.

Unemployment usually increased the demand to close the door to foreign workers in immigration countries. Qualitative evidence stresses the high rates of unemployment in Argentina during the 1890s crisis but restrictions on massive immigration did not follow, as it happened in Australia. When wages, and therefore savings, earned in local currency, lost their value in relation to gold-standard currencies, workers responded by booking passages home. It could be argued that there was a “guestworker” effect in Argentina during the early 1890s since return migration reached very high levels in 1890-1895: net migration dropped to 8.2 percent compared to 38 percent during 1885-1890.15 Immigrants did voluntarily what any policy of restriction would have done. The crisis showed that distress in the labour market could be more easily alleviated by going back home (or moving to another immigrant country as Brazil or Uruguay). The declining cost of the trip allowed this safety valve in times of

13 According to Devoto (2003a) there were several bills in Congress proposing to restrict the arrival of illiterate immigrants. All of them were rejected by the majority.
14 In this calculation, I have excluded children from overall illiteracy rates in the Argentine immigration statistics particularly in the years immediately before World War I when the proportion of families with children arriving to Argentina reached its peak. Data from Resumen Estadístico del Movimiento Migratorio en la República Argentina, 1857-1924, Buenos Aires, Dirección General de Inmigración, 1925. For 1923-27 data come from “Movimiento general de extranjeros durante el quinquenio 1923/27” Dirección General de Estadística y Censos (mimeo).
15 In the year 1891 out-migration was higher than immigration leaving a negative migratory balance of nearly 30,000. (Vázquez-Presedo 1988)
unemployment (Fogarty 1989). Therefore, the legacy of the 1890 crisis for policy makers seem to be the perception that policy restrictions were unnecessary since the immigration flow were very sensitive to economic conditions and contracted in adverse economic scenarios.

After the 1890s crisis immigration policy was unambiguously designed to address the needs of the labour market: the focus was on seasonal workers and not on workers to settle in the land permanently. Labour demand was highly seasonal and dominated by the agrarian cycles. Arable agricultural land needed two types of workers: one willing to work seasonally and another one to work year round. Immigrants were crucial for the first case, particularly those who crossed the Atlantic annually, but local workers (with a high number of immigrants among them) were moving out and into the cities depending on demand of labour in agriculture (Adelman 1992; Galiani and Gerchunoff 2003). Argentina can be described as a low unemployment, labour-scarce country. But if the frequency of unemployment refers to the percentage of workers left idle at any time during the year, Argentina was a highly seasonal unemployment country. Nonetheless, Adelman (1994) stresses that from the 1900s onwards a highly mobile labour force shifting between the rural and the urban sector only experienced unemployment while waiting for the next harvest season. The possible shortage of labour for the harvest season was always a main concern in Argentina. Although massive immigration became a growing concern among intellectual circles the landowners and capitalist interests seem to have been a powerful force against any restrictive measure of the inflow of foreign workers. During the 1920s, when immigration arrivals decreased there was an increasing anxiety about tightness in the labour market. For contemporaries, if the shortfall of immigration was to be offset by increased natural population growth, there would be a substantial lag before native-born children entered the labour market. Immigration, by contrast, represented an immediate addition to the labour force. Lewis (1992) documents how in the late 1920s agrarian and industrialist organizations complained bitterly about a general shortage of labour, skilled and unskilled.

Too many immigrants can raise hostile reactions from natives.

Table 1 show the impact of mass immigration to New World countries according to Taylor and Williamson (1997). Immigration served to raise Argentina’s labour force in 1910 by an impressive 86 per cent (compared to 24 percent in the United States) and between 1870 and 1910 immigration accounted for 60 per cent of population increase. Net immigration rate in Argentina after 1870 more than doubled the United States rate. Argentina was the country with the highest rate of foreign population to natives in the world so the quantity of
immigrants could have been a relevant variable for immigration policy. However, the relationship can work in both directions. If policy makers believe that population growth is an essential component for economic development immigration policy can be designed to pull a large number of immigrants. Over time, a high percentage of foreigners can raise hostility from native society.

Immigrants usually gather in specific areas and regions. In an attempt to link different interest groups to political outcomes Goldin (1994) considers not only capital and labour interests but also rural-urban divisions. In the United States the probability that a legislator would vote for immigration restrictions was negatively associated to the proportion of foreign-born in a given district and was also negatively related to the level of urbanization. The rate of urbanization in Argentina grew very rapidly since the 1870s precisely because of immigration: the percentage of foreigners over total urban population grew from 22 percent in 1869 to 37 percent in 1914. Foreign population concentrated mainly in the Pampean region and in the cities of high economic growth. The city of Buenos Aires absorbed the largest number of immigrants: in 1914, native-born and foreigners had equal shares in total city population but male foreigners outnumbered male native born (Recchini de Lattes and Lattes 1975). Other cities such as Rosario, Córdoba or Santa Fe also showed a high concentration of immigrant population. At the turn of the 20th century, the government tried to redirect, quite unsuccessfully, the newly arrived immigrants to places other than Buenos Aires. Landowners constantly complained about shortage of labour in the rural areas while there was an increasing alarm for the concentration of immigrants in urban areas. Public debates on the need to change immigration policy were always dominated by a dual problem: there were too many immigrants in the cities and very few in the rural areas.

If Goldin’s conclusions for the United States were to be applied to Argentina, the fact that immigrants were overwhelmingly represented in the cities would led us to conclude that urban populations would have opposed restrictions to immigration. But simultaneously urban immigrants were seen to be at the root of social problems such as crime, alcoholism, prostitution and street violence among others. City growth and the concentration of immigrants in urban population can, therefore, be related to hostility toward foreigners and demand for restrictions on immigration.

Argentine immigrant communities did not split into inter-ethnic rivalries as North American immigrants did. Nor were ethnic features correlated to skilled levels; each community hosted a spectrum of occupations and skills (the majority of them unskilled) with the exception of the small group of “old immigrants” from Northern Europe who arrived in the 1870s (Adelman 1992). As mentioned before there was no great difference in the ethnic
profile of immigrants in the 1880s and the 1920s. Generally speaking, immigrants were rather successful in Argentina urban labour markets. Traditional immigrant groups were over-represented among industrial proprietors and commerce owners. In terms of property ownership, for example, Italians did far better in Argentina than in the United States (Klein 1983; Baily 1999). However, immigrant businessmen and professionals also met increasing intellectual criticism. Solberg (1970) describes how the high percentage of foreigners in commerce and business provoked the fear that they might totally exclude nationals from business. Immigrants’ economic success seems to be related to the fact that immigrants were seen more and more as competitors in the skilled and semi-skilled labour market.

Concentration of landownership and political power resulted in policies open to mass migration

Most academic discussion on immigration policies assume that the interest of capital and labour are divided. Foreman-Peck (1992) argues that landownership matters as well, particularly in the export oriented agricultural economies of the New World. Landowners producing for the world markets had a lot to gain by increasing labour supply through massive immigration. In those countries where land ownership and political control were highly concentrated, an increase in the scarcity of labour relative to land creates both a demand and a supply from the landowner controlled government for pro-immigration policies. This explanation seems an accurate description of Argentinean immigration policy and traditional historians’ interpretation fits nicely with Foreman-Peck (1992) model. Argentina had an abundance of natural resources and a scarcity of labour. Without European immigration the supply of labour in the Argentine market would have been insufficient to meet its demand. Therefore, landowners supported an open immigration policy since the had a lot to gain by increasing labour supply. Over time, capitalist joined forces with landowners; owners of land and capital controlled the government and prevented any major change in immigration policy until the 1930s crisis. Even when nationalist ideology became popular among the elite, immigration was not restricted since the ruling groups remained convinced that immigration was essential to economic development and vital to the smooth functioning of the labour market.

Spaniards in turn were more successful than native workers in Buenos Aires in securing skilled occupations and entering into commerce (Moya 1988).
Inequality matters.

The distributional impact of international immigration has been confirmed for the age of mass migration since inequality increased in receiving countries (Williamson 1997). Timmer and Williamson (1998) introduced inequality as a crucial variable to explain the rise of immigration restrictions. As in the rest of the New World inequality increased in Argentina from 1870 to 1930. The deterioration of the relative position of unskilled wage relative to the average income, or more directly, relative to land rents might have been quite a powerful reason to change immigration policy.

Since government redistributive policies were very modest before the 1930s, citizens might vote for restrictions to immigration simply because they disliked the increase in inequality or because those whose situation relatively deteriorated gradually became a large share of voters. If the majority of the unskilled workers do not have the right to vote and the political system is dominated by those well-off, rising inequality might be a secondary concern in immigration policy. The extension of electoral franchise is, therefore, a key variable since it allowed those adversely affected by the increase in inequality to have political voice.  

Argentina had an electoral reform in 1912 (the Sáenz Peña Law). Contrary to widely held views among scholars, the Saenz Peña Law did not introduce male universal suffrage in Argentina. Electoral laws never sanctioned restrictions in the suffrage but fraud and electoral manipulation were the norm. The 1912 electoral reform made the existing universal adult male suffrage compulsory for natives over eighteen years of age; it established an electoral roll based on military conscription lists and a provision to ensure the representation of minority parties (Botana 1985). Compulsory and secret voting explains the increase in electoral participation. In 1916 the Radical Party (UCR), traditionally in opposition, won the elections. Economic policy did not change greatly during the 1920s but some scholars argue that the electoral shift meant that immigration policy became the subject of a more popular debate like the one encountered by President Alvear’s 1923 proposal to reform immigration law (Cook Martin 2008). Therefore, it is not clear whether the change in government might be related to the moderate increase in restrictions during the 1920s (see next section).

To sum up, reasons to restrict immigration in Argentina can be grouped in (1) quantity and quality of immigrants. The extraordinary high percentage of foreigners over total population, the massive concentration of foreign population in very few areas and cities, and the rapid growth of the immigration rates particularly before 1914 seem to be powerful forces

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17 Voters could however give priority to growth over distribution and considered the rising inequality as not harmful for future economic growth.
to close the door if immigrants were perceived as a threat to native workers. Relative literacy of immigrants decreased over time but not as much because of a declining quality (as literacy rates of immigrants generally improved) but because of an extraordinary improvement in literacy of local population. Nothing very clear can be said about the evolution of real wages (both in absolute and in relative terms) and immigration policy. However, it seems safe to assume that had Argentina introduced restrictive policies similar to those in the United States the growth of real wages during the 1920s would have been presumably higher.

(2) Unemployment is usually related to closing doors to foreign labour. However, an elastic flow of labour force between Southern Europe and Argentina might have rendered restrictions unnecessary. Immigrants returned home when there was an economic downturn (doing voluntarily what any policy of restriction would have done) and back again when conditions improved. (3) Inequality increased in Argentina and it might be a powerful force pushing for restrictions (provided voters were able to relate immigration and inequality and those whose relative position deteriorated had the power to vote).

Simultaneously, there were other forces that seem to push in the opposite direction: large numbers of workers were needed during the harvest season and there was a constant fear of a labour shortage in agriculture and in the export sector. Political institutions were dominated by those who had most to gain with an abundant supply of labour, (i.e. landowners and urban capitalist) and there was a constitutional provision to foster immigration; therefore immigration restrictions were difficult to approve. The next section will elaborate on some political economy variables that might also explain immigration policy.

3. A political economy explanation of Argentine immigration policy

In relative terms, Argentina remained a country more open to immigrants than others in the New World, except Brazil. In their pioneer research Timmer and Williamson (1998) concluded that in the case of Argentina “what remains a puzzle are the offsetting variables (the residual) that kept immigration policy from becoming even more restrictive”. According to Solberg (1970:179), immigration policy in Argentina was irrational and short-sighted since it was dominated by the interests of big landowners. Political participation increased notably after World War I due to an electoral reform in 1912 (Cortés Conde and Gallo 1986). It can be suggested that during the 1920s workers could have increased their influence in Parliament thorough cleaner and more open elections.

Employing standard production function and trade analysis political scientists and economists predict that capital wins and labour losses from immigration. For the 19th century,
landownership has also been placed on the winner side. Preferences of labour and capital are
directly linked to labour unions and employer federations that acted as interest groups. Trade
unions should resist immigration because it imposes a downward pressure on wages (although
skilled and unskilled workers may have contrasting interests). Argentine labour movement
was closely linked to European immigration. The working class movement was dominated by
European anarchists who seem to have been more worried about the working conditions,
hours of work and political activities such as the “social revolution” than about the massive
inflow of European workers. Unions always asked for higher wages but they never related the
wage level to massive immigration. During World War I the suspension of immigration
increased unions’ bargain power. Generally speaking, however, labour organizations were
unable to formulate a practical response to the disruptive effects of labour surplus. Unions
never acted as a pressure group pushing the government to close the door to foreign workers.
The strong presence of European workers in the Argentinean unions could explain such an
otherwise irrational behaviour. On the contrary, industrial and rural owners’ federations had
the expected pro-immigration policy with a strong emphasis on an abundant supply of labour
while excluding radical (socialists and anarchists) immigrants (Ospital 1994).

Political science will identify Argentine as a producer dominant model that involves
relatively small and easily organized groups supporting policies that provide them direct
benefits. Immigration generated concentrated benefits and diffused cost (Freeman 2006: tab.
1). Political parties are key institutions in the process by which immigration policy is
formulated as they aggregate blocs of votes and organised interests acting therefore as interest
groups. From 1870 to 1930 two main blocs of political parties dominated Argentine political
scenario: the Conservatives (populists or traditional) that basically controlled government and
parliament up to 1916, and the Radical party, traditionally in opposition until a major change
in the electoral system was approved. The traditional interpretation is that the Conservative
Parties represented landowners and capital interest and that the Radical Party stood for urban
low and middle class. Gallo and Sigal (1963) and Alonso (1993), among others, disagree
since they claim there was no such drastic change in politics and electoral constituencies
between Radicals and Conservatives. The turning point came after the reform of the Electoral
Law in 1912. Up to 1912 elections were supposed to be corrupt, with very low participation
rates and controlled by the ruling elite but from 1916 onwards the electorate expanded
significantly since elections became cleaner and more open.\footnote{For a detailed analysis of parties and elections in the province of Buenos Aires after 1912, see Walter (1984).} If this representation is true,
we can assume that broadening the electoral participation, would have had a significant effect
in immigration policy. The increase in restrictions during the 1920s seems a priori to be closely related with labourers’ interest now represented in Parliament.\textsuperscript{19}

Did Parliament composition change in a significant way after the 1912 electoral reform? Landowners, industrial and urban professionals were almost equally represented in Argentine political parties (the exception being the Socialist Party with more manual workers in their ranks). The data on parliament composition clearly demonstrate the absence of any powerful link between social status and party affiliation in the period 1904-15. Nearly two-thirds of all Radical deputies came from aristocrat backgrounds. The situation underwent little change in 1916-30, the era of Radical rule. Less than one-third of the Radical deputies came from aristocrat background.\textsuperscript{20} Educational and family backgrounds were very similar among conservative or radical deputies and there were not significant differences in the composition of Parliaments before and after 1912 (except for the novelty of a minority of Socialist deputies). Furthermore, there was continuity in economic policy between the Conservative and the Radical era. Although the Radical governments of the 1920s introduced more social welfare legislation they were never preoccupied about income distribution. According to Alhadeff (1989) as long as there was growth, the consensus was that there would be progress in the absolute position of labour and capital; their relative share in income was less significant. From the political point of view it is not easy to divide Argentine political parties along labour versus capital lines. Immigration was never an issue in Argentine politics and even the leader of the Socialist Party had a liberal view on immigration (Rodriguez Braun 2008).

Could the working poor, negatively affected by the massive inflow of immigrants, do anything in the political arena? After all, we have seen that inequality increased in Argentina so there might be a relationship between changes in income distribution and restrictions to entry. A large fraction of Argentine workers were foreigners. Immigrants compromised approximately one-half of the expanding middle class and even greater share of Argentina’s working class (around 60 percent in urban areas). They were over-represented in working class (skilled and unskilled), but immigrants had no political power since the majority of them kept their European nationalities. Foreigners could not vote in general elections and around 1914 only 1.6 percent of the foreign born population was citizens. The extension of the

\textsuperscript{19} In the early 1920s there were two crucial votes in Parliament on industrial tariffs. Unsurprisingly, the Socialists supported free trade and Conservative defended protectionism. A more complicated dispute arose within the Radical Party along regional lines (Rocchi 2006: 155) The Socialists always opposed immigration restrictions.

\textsuperscript{20} Smith (1974: 30) Aristocracy is defined as a group of people who hold simultaneously predominant shares of economic and social power: men of high finance, large property owners and big industrialists according to Cantón (1966: 40-41)
franchise has a very different meaning in a country where the majority of the population did not have the right to vote simply because they were foreigners. In 1895 only 27 per cent over total population had voting rights (since foreigners, women and males natives under 20 years of age were excluded). The percentage dramatically dropped to 14.5 per cent in 1914 due to the massive inflow of immigrants (the majority of them males over 18). The electoral system actually offered voting rights to only 40 or 45 per cent of the adult male population on the eve of World War I (Smith 1974:11). Electoral participation rose sharply after 1912 but the reform did not alter the fact that foreigners voluntary excluded themselves form the electoral system. In the United States immigrant votes were always important to political parties since easy naturalization and voting laws transformed immigrants into a recognized electoral presence. In a completely different institutional setting immigrant workers in Argentina could not influence directly the political outcome as it was the case in the US.

In Argentina, when inequality increased, a large portion of workers adversely affected could do nothing to change immigration policy. Why, then, immigration policy became restrictive? How can we explain that restrictions of entry were on the rise since the 1900s? This paper argues that economic fundamentals did influence Argentina immigration policy but not in a direct way as in countries with a wide electoral franchise, high political participation and high rates of naturalization like the United States but through an indirect channel. Economics explain that labour in Argentina would have been better off with a more restrictive immigration policy (in the Australian way) since 1900. Political institutions were, however, in the hands of those more benefited by open immigration policies (land and capital interests). Unskilled workers had very low rates of political participation and foreign workers were voluntary excluded from the electoral process. Since labour interests could not be translated into Parliament those negatively affected by unrestricted immigration developed alternative actions: general strikes, labour unrest and violence.

Acemoglu and Robinson (2008: 676) distinguish between de jure and de facto political power. The latter appears when a group of individuals, even if they are not allocated

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21 Women had no voting rights throughout the period considered so the percentage of population entitled to vote must be adjusted to the total number of native males over the legal age. Population data come from censuses. The number of those eligible to vote is obviously different from what fraction of the population actually voted.

22 The percentage of native-born men with voting rights was lower in some districts as Buenos Aires, Santa Fe and Córdoba since women (natives and foreigners) and men below 18 have to be excluded (Cortés Conde and Gallo 1996).

23 Why immigrants in Argentina did not become citizens is beyond the scope of this paper (Moya 1998:489) concludes that low naturalization rates are attributable to the lack of incentives for naturalizing. Foreigners had all the rights of citizens (except to vote in national elections), but were exempted from the most cumbersome civic obligation: military service. Others have suggested that from a migrants’ standpoint, there were strong incentives not to naturalize to the extent that naturalization implied loss of original nationality (Devoto 2003). See also Cook Martin (2005).
political power by political institutions, may nonetheless possess it. They can revolt or use economically costly (sometimes peaceful) protests in order to impose their wishes on society. An increasingly radical labour movement developed in Argentina and acted as a *de facto* political power. It was the channel used to express discomfort since workers could not otherwise influence policy. According to Baily (1999: 201) given the restricted nature of the Argentine political system, it is not surprising that the direct action of the anarchists and revolutionary trade unions held greater appeal to the immigrants than the call to naturalize and change the system by participation in essentially meaningless elections. The ruling class identified strikes (sometimes violent) and labour agitation as a direct consequence of the indiscriminate admission of foreign troublemakers and eventually restricted immigration.

There were two basic anti-immigration turning points before 1914 that can be explained within this political economy framework: the 1902 Residence Law and the 1910 Law of Social Defence. In November 1902 there was a general strike (in the middle of the harvest season) after one year of constant labour agitation, work stoppages, boycotts and demonstrations. Docked ships were left to their own devices, hundred of carts containing agricultural products crowded the piers and imports and exports ceased (Oved 1976). The Residence Law was passed by Congress at an extraordinary session as a result of an emergency situation. The 1902 Law allowed the executive to expel foreigners involved in anarchist activities. Members of Parliament clearly stated that the legislation was “a law of exception” and was directed only against foreign agents and political agitators (Castro 1991). Between 1902 and 1910 five curfews were imposed basically to allow ports activities. After three more general strikes the second anti-immigration turning point came in 1910 (after a bomb exploded at the Colon theatre in Buenos Aires) with the Law of Social Defence. This time, the government could act directly on the immigrant flow since captains of shipping companies who landed out of law immigrants could be fined. The Residence Law was supported by one of the leading employers association: the Unión Industrial Argentina. The 1910 legislation was approved after massive and violent general strikes such as the tenant’s strike of 1907 and the “Red Week” of 1909. It was the governing elite, the inheritors of the liberal tradition, who feared the consequences of unrestricted immigration and who approved immigration restrictions (Fogarty 1989:189). Having made no connection between labour unrest, saturation of the labour market, and immigration policy, authorities blamed a handful of anarchists (Adelman 1992:101).

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24 However, the 1902 Law could not affect greatly the immigrant flow since it was directed to those foreigners (the immigrant stock) already residents in Argentina. In addition, the Residence Law was rarely enforced. Between 1902 and 1958 when the Law was finally amended only 383 people were deported (Albarracín 2004: 50).
Anti-immigration legislation came from capital and landowners. Immigration policy became gradually more restrictive before World War I because workers acted as a de facto political power. After the War, immigration restrictions were step up in a more complex scenario: native labour and unions gained political representation, unskilled workers were better off since immigration rates decreased in the 1920s, and “new immigrants” of inferior quality although few in number, arrived. The government, unable to change the old 1876 Immigration Law, approved an administrative decree increasing the regulations of entry. In the mean time, the United States closed the door in 1921 and 1924.

The next section will try to disentangle the different forces shaping Argentina immigration policy.

4. The determinants of Argentine immigration policy: a quantitative exploration

The next step is to test empirically the relationship between immigration policy and economic and political variables. Table 2 present two different equations. The dependent variable is the BSA index of immigration policy (IMMPOL). It should be observed that the index presents a decreasing trend over time: lower values mean an increase in immigration restrictions. Independent variables can be classified in four different groups: (1) quantity and quality of immigrants; (2) inequality; (3) economic and labour market fundamentals, and (4) political variables. Methods and sources for independent variables are presented in appendix B. Independent variables are lagged different periods since it is assumed that policy was slow to change. Both equations reveal interesting results although they are more robust for equation 2.

Quantity of immigrants, either measured by the immigration rate as in equation 1 or by the percentage of foreigners over total population (equation 2), shows a positive sign. Immigration policy was designed to augment population and the labour force. The percentage of foreigners over total population grew from 12 percent in 1870 to 22 percent in 1930 with a peak of 30 percent in 1914. Figure 4 show how except during the period 1905-1914, when the rapid growth of foreigners seem to have pushed forward restrictions, the two variables evolved in the same direction. Goldin (1994) concludes that in the United States the share of foreign born population is positively related to open immigration policy. Foreign born and their children generally supported open immigration for the reunification of their families; the channels of this relationship in the Argentinean case are not as straightforward as in the

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25 The Red Scare peril after the Bolshevik revolution encouraged the brief yet crucial defection of key business groups from the pro-immigration camp in the United States since immigrants from Europe might propagate the ideas of the Russian revolution (Tichenor 2002: 142).

26 Additional econometric tests for regressions in Table 2 are presented in appendix C.
United States since few immigrants naturalized, but there were many more immigrants descendants that might be as well opposed to restrictions even if their jobs and wages were threatened by unrestricted immigration.

It is true that too many immigrants can raise hostile reactions particularly if their ethnic composition is different from native population and from old immigrant’s cohorts. In the case of the United States, the switch of emigrant source countries from higher-wage to lower-wage areas in Europe raised a major concern about quality of immigrants. The story is different in Argentina since there is not such an ethnicity gap (Figure 2). National origins of immigrants were overwhelmingly dominated by Latin immigrants from the beginning; higher-wage Northern Europeans decreased and “new immigrants” from lower-wage areas increased over time but both groups were a minority in a flow dominated by Italian and Spanish immigrants. New immigrants were too recent and too few to influence policy. An additional explanation might be the constant fear of labour scarcity among the ruling class: even when the percentage of foreigners reached very high numbers the agrarian and export interests seem to have been a powerful force against more restrictive measures of the inflow of foreign workers.27

In Table 2 quality of immigrants is proxied by the average literacy rate of immigrants (weighted by the share of each nationality in the immigration flow: IMRELIT). Immigrants’ literacy increased over time but their quality relative to the native-born decreased in the long run. From a remarkable literacy gap between natives and immigrants in the 1870s, the situation reversed in the 1920s. Natives and second generation of immigrants became more literate than their foreign parents. Therefore, even when immigrants’ literacy rates improved over time, native-born ones increased faster so the relative quality of immigrants decreased. In equation 2 a direct relationship is observed which means that declining relative literacy is positively correlated with restrictions to immigration. The higher the immigrants’ relative literacy, the more open the immigration policy; a finding that confirms the usual prediction in immigration models.

Inequality is measured as the ratio of GDP per worker relative to real unskilled wages (Williamson 2002). The long run evolution of real GDP per worker (RY) and income inequality (YTORW) in Argentina are presented in Figure 5. A redistribution of income at the expense of workers took place in Argentina up to World War I. Inequality trend reversed in the interwar period. Equation 2 shows a negative and significant relationship between the

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27 For the persistence of ideas regarding the need for population growth in Argentina, see Sánchez-Alonso (2007b)
28 Two other variables designed to capture the quality of immigrants were included in previous estimations: average wages of immigrants at origin (weighted by the share of each nationality in the immigration flow) and immigrants’ wages relative to destination wages. Both proved non significant and are not reported here.
inequality variable and the immigration policy index. This result confirms previous interpretations on the relationship between increasing inequality and more restrictions to massive immigration in New World countries (Timmer and Williamson 1998). However, how inequality affect immigration policy depends on whether (a) those adversely affected by inequality blame immigration for the worsening of their relative position and (b) they can use their vote to change immigration policy. Furthermore, policy makers could worry more or less about increasing inequality depending on their constituency. The extension of electoral franchise is, therefore, a key variable since it allowed those adversely affected by the increase in inequality to have political voice.

As mentioned before, no other country had a higher political participation than the United States in the 19th century, so the white worker had an important voice in the choice of immigration policy (Hatton and Williamson 2005:163). All Latin American countries lagged behind in political participation. Argentina was not an exception despite the 1912 electoral reform that made voting secret and compulsory. In order to capture the possible effect of this change on immigration policy a dummy variable is included in the regressions taking value 0 for the period 1870-1912 and 1 from 1913 to 1930 (SUFFRAGE). Both equations show a negative association between the extension of the franchise and openness in immigration policy. Thus, it appears that the electoral reform and the increase in political participation had a high significant impact on augmenting restrictions to immigration in Argentina. More open and cleaner elections gave political voice to a broader segment of the population. Even taking into account that foreigners had not the right to vote, electoral changes after 1913 had the expected consequence in immigration policy.

Immigration might have increased inequality but simultaneously fostered economic growth. In Latin America economic development went hand in hand with an increase in economic inequality during the 19th century (Prados de la Escosura 2007; Coatsworth 2008). Figure 5 shows this was, indeed, the case for Argentina. Real GDP per worker (RY) is, therefore, another variable included as determinant of immigration policy. Economic growth, measured as real GDP per worker, shows an inverse relationship with immigration policy: the richer the country, the more restrictive the immigration policy. Scarcity of labour was one of the major obstacles to economic growth around 1870. The massive entry of immigrants was an important component of Argentina economic growth before World War I. In the long run, the economy grew but population grew as well and the scarcity of labour force was no longer

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29 In Timmer and Williamson (1998) regressions the variable for income inequality is not significant for Argentina. It is a significant variable, however, for the United States, Canada and Brazil. The latter is a puzzling result since Brazil had a very different franchise than the US and Canada and it is difficult to believe that Brazilian politicians and landowners tried to protect the economic position of the unskilled workers.
an obstacle for development. Finally, for reasons elaborated in section 3, the annual number of strikes has been included as a dependent variable (STRIKES): if immigration is associated to social unrest and labour conflicts and, consequently, to a disruption of the economy, restrictions on entry of foreign workers will follow (Figure 6). The econometric results presented in table 2 seem to suggest that this was the case in Argentina. The annual number of strikes in Argentina shows a significant and negative relationship with the immigration policy index. Labour unrest, social conflict and the disruption of the existing economic and social order (proxied by strikes) provoked a change in immigration policy from a Congress dominated by land and capitalist interests.

Conclusions

In the midst of the Great Depression (1932) Argentina finally established for immigrants the requisite of a labour contract prior to arrival and/or proof of financial means of support. Close relatives of already resident immigrants were freely admitted. At that time the children of many Europeans who had arrived before 1914 were coming of age and were replacing their fathers in the Argentine middle class. Fervently nationalistic and identifying strongly with traditional Argentine values, this new generation now resented the competition of foreign workers and applauded government moves to restrict immigration. Unlike their ancestors, they could influence policy in a direct way since they have a strong political power.

The quantitative evidence presented here suggests that prior to the 1930s Argentina had economic reasons to restrict immigration: rising inequality, a decreasing relative quality of immigrants and a declining demand for foreign labour force as population and the economy grew. Labour in Argentina would have been better off with a more restrictive immigration policy since 1900. However, restrictions remained moderate since labour interests could not be translated directly into Parliament. In the United States easy naturalization and voting laws transformed immigrants into a recognized electoral presence. Male universal suffrage meant something very different in a country like Argentina where a large number of workers did not have the right to vote simply because they were foreigners. In a completely different institutional setting immigrant workers in Argentina could not influence directly the political outcome. Consequently, those negatively affected by unrestricted immigration developed alternative actions: general strikes, labour unrest and violence. Contrary to what economic theory would have predicted in Argentina anti-immigration legislation came from capital and landowners because of the fear of political and social unrest.
REFERENCES


ASTORGA, P. BERGÉS, A.R. and FITZGERALD, E.V.K. (2003), The Oxford Latin America Economic History Database. The Latin American Centre at Oxford University, http://oxlad.qeh.ox.ac.uk/


BUNGE, Alejandro E., (1940), Una nueva Argentina, Buenos Aires, Hyspamerica [1987]


CASTRO, Donald S. (1991), The Development and Politics of Argentine Immigration Policy, 1852-1914. To Govern is to Populate, San Francisco, Mellen Research University Press


COOK MARTIN, David (2008), Rules, Red Tape and Paperwork: The Archeology of State Control over Migrants”, Journal of Historical Sociology, 21, 1, pp. 82-119

COOK MARTIN, David (2005), “Proactive Recruitment and Retentionist Patterns of Migration and Nationality Policy in Argentina, Italy and Spain (1850-1019), Paper 29, Theory and Research in Comparative Social Analysis, Department of Sociology, UCLA. http://repositories.cdlib.org/uclascotrca/29


CORTES CONDE, Roberto and GALLO, Ezequiel (1986), La República Conservadora, Buenos Aires, Hyspamérica


GERMANI, Gino (1955), Estructura social de la Argentina, Buenos Aires, Ed. Raigal


NASCIMBENE, Mario C. (1987), Historia de los italianos en la Argentina (1835-1920), Buenos Aires, CEMLA.

OSPITAL, María Silvia (1994), Inmigración y nacionalismo: la Liga Patriótica y la Asociación del Trabajo (1910-1930), Buenos Aires, Centro Editor de América Latina


RECHINI DE LATTES, Zulima and LATTES, Alfredo. E. (1975), La población argentina, Buenos Aires, Instituto Nacional de Estadística y Censos


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<tbody>
<tr>
<td>Argentina</td>
<td>11.74</td>
<td>60 %</td>
<td>15.50</td>
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<td>Australia</td>
<td>6.61</td>
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<td>Brazil</td>
<td>0.74</td>
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<td>Canada</td>
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<td>United States</td>
<td>4.03</td>
<td>17 %</td>
<td>5.31</td>
<td>24 %</td>
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Source: Taylor and Williamson (1997: table 1)

* Rates per thousand per annum.
### Table 2
Determinants of Argentine Immigration Policy 1870-1930

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<tr>
<th>Dependent Variable IMMPOL</th>
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<th>Equation (2)</th>
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<tr>
<td>Constant</td>
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<td></td>
<td>(3.0338)</td>
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<td>IMRATE(-1)</td>
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<td>Immigration Rate</td>
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<td>% Foreigners over total population</td>
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<td>IMRELIT</td>
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<tr>
<td>Immigrants’ relative literacy</td>
<td>(6.6808)</td>
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<tr>
<td>IMRELIT(-1)</td>
<td>3.9762</td>
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<tr>
<td></td>
<td>(3.6176)</td>
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<td>YTORW</td>
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<td>Income inequality</td>
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<td>YTORW(-1)</td>
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<tr>
<td></td>
<td>(-2.0830)</td>
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</tr>
<tr>
<td>RY(-2)</td>
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<tr>
<td>Real GDP per capita</td>
<td>(-4.1433)</td>
<td>(-2.1608)</td>
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<tr>
<td>SUFFRAGE(-1)</td>
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<tr>
<td>Adjusted R-squared</td>
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</table>

*Sources: Appendix B*

*Notes: Method OLS; t-ratios in italics and in brackets; the number of lags for the dependent variables appear in brackets.*
Figure 1. Indices for Argentina Immigration Policy, 1870-1930.
Sources: For the BSA index (left scale) appendix A; for the T&W index (right scale) Timmer and Williamson (1998)

Figure 2. Immigration Composition by Origin, 1870-1930 (Main Groups) (%).
Sources: Appendix B
Figure 3: Immigration Policy Index and Immigrants’ Relative Literacy, 1870-1930 (Argentina =1)
Sources: Appendix A and B.

Figure 4: Immigration Policy Index and Percentage of Foreigners over Total Population, 1870-1930
Sources: Appendix A and B.
**Figure 5.** Argentina 1870-1930: Real GDP per capita and Income Inequality  
*Sources: Appendix B.*

**Figure 6.** Immigration Policy Index and Annual number of Strikes in Argentina, 1870-1930.  
*Sources: Appendix B.*
Appendix A

Argentine legislation on immigration and values for the new index of immigration policy

The index of Argentine immigration policy intends to measure policies that are likely to directly affect the costs or benefits of migrating to Argentina as viewed by the prospective immigrant. It is not always possible to calibrate some pieces of legislation (the 1902 Residence Law might be the case in point) that seem to respond more to the intentions of immigration policy as viewed by the government.

Policy is coded from value 0 (closed immigration policy) to 10, the latest being a totally open immigration policy with the usual restrictions. The 1876 Law of Immigration and Colonization included in the category of “inadmissible”: individuals afflicted with contagious illnesses (or from ports where there had been an outbreak of cholera, yellow fever or other communicable disease), the insane, convicted felons, and the elderly (unless they were heads of household) (Articles 31 and 32). The last three categorical exclusions were common place in immigration policies. During the period under review illness was not often used to exclude immigrants possibly because the LIC held shipping concerns financially responsible for the repatriation of diseased individuals.

From 1870 to 1930 temporary lodging on arrival, free transport inland from Buenos Aires and easy naturalization remained in place.

According to the 1876 Law, every immigrant who satisfactorily proves his good conduct and his skill in any trade or industry has the right on entering the Republic to the following advantages: (1) To receive board and lodging at the expense of the State from 5 to 22 days according to the circumstances, such as the immigrant's state of health; (2) To be placed in employment in the trade or industry of his choice if it exists in the country; (3) To be transported at the expense of the State to the part of the Republic in which he desires to settle; (4) To bring with him, free of all duty, furniture, clothing, instruments and tools which are necessary for the work he is going to undertake, up to the value indicated by the Executive Power. These provisions are extended, wherever they are applicable, to the wives and children of immigrants. Special and more generous regulations were in force for immigrants who were going to agricultural settlements.

The lowest values of the index (closed or only slightly ajar doors enforced) were never reached before 1930. Restrictive quotas and/or literacy test were never introduced in Argentina during the period considered. A December 1930 decree imposed a consular fee of 10 pesos gold for stamping required health, good conduct and financial solvency certificates but in 1931 another decree exempted would-be settlers from the payment of consular fees. Finally, in 1932 the government suspended all visa authorizations at the point of departure for people who did not have a work contract in hand and/or support from an authorized and financially solvent family member.

<table>
<thead>
<tr>
<th>Index Values</th>
<th>Norms, legislation and regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5</td>
<td>1853</td>
</tr>
<tr>
<td></td>
<td>Constitution: Preamble invites all good-willed citizens of the world to immigrate to Argentina.</td>
</tr>
<tr>
<td></td>
<td>Article 25 establishes that the federal government will foment European immigration. Easy or low requirements for naturalization. Legal property ownership for foreigners.</td>
</tr>
<tr>
<td></td>
<td>1869</td>
</tr>
<tr>
<td></td>
<td>Law 346 (Citizenship Law):</td>
</tr>
<tr>
<td></td>
<td>Foreigners with two years of residence can acquire Argentine citizenship).</td>
</tr>
<tr>
<td></td>
<td>Creates offices in Europe to promote immigration to Argentina (Article 4)</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>1876</td>
<td>Law 817 (Avellaneda Law) Colonization and Immigration Law. Subsidized passages (effective only from 1887 to 1890). Temporary lodging and free transport inland from port of arrival. The government will help immigrant to find a job or occupation (Article 14). Public land sale in Europe for the creation of agricultural colonies for immigrant workers (Article 61 and ff.). Land would be subdivided for settlers in parcels of 100 hectares. Each one of the first hundred families will be awarded a free lot and the rest could be bought at two pesos per hectare with easy payment terms. (Articles 85 and 86) No head tax but sick people over 60 years of age excluded.</td>
</tr>
<tr>
<td>1887-1890</td>
<td>Creation of Immigration and Advertising Offices in Europe. Public funds for the program of subsidized passage (100% of the fare) for European immigrants according Avellaneda Law (740,000$)</td>
</tr>
<tr>
<td>1891</td>
<td>Legislature declares an official end to the era of “artificial immigration” Subsidy program ends. No advertising labour offices in Europe but increase in the number of Consulates acting as information and propaganda centres. No public land sale for settlement but government allowed and encouraged private colonization schemes. Active role of the Office of Labour in directing immigrants to the interior.</td>
</tr>
<tr>
<td>1894-1901</td>
<td>No colonization schemes (public or private) but continuing advertising and propaganda through consular services and steamship agents No contract labour from railways companies and an increase in categories of sick people excluded.</td>
</tr>
<tr>
<td>1902</td>
<td>Law 4144 Residence Law: Allow the Executive to deport those immigrants that had committed crimes abroad (Article 1) or those that behave in ways that threaten national security or public order (Article 2)</td>
</tr>
<tr>
<td>1905</td>
<td>Congress passed a Law authorizing the government to build a new Hotel for Immigrants in the port area.</td>
</tr>
<tr>
<td>1906</td>
<td>Budget for propaganda through consular service increased from 201,140 $m/n to 492,040 $m/n. Increase in categories of sick people excluded. More sanitary controls on arrival particularly for contagious diseases.</td>
</tr>
<tr>
<td>Year</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>1910</td>
<td>Law 7209 Social Defence Law: Deportation provisions established for foreigners involved in anarchist activities as in 6 but this time with the establishment of fines for captains of shipping companies transporting immigrants outlawed by Argentine law. Prohibits the entry of those previously expelled from the country (Article 1)</td>
</tr>
<tr>
<td>1916</td>
<td>Enlarged list of excluded classes for sick and mentally ill immigrants. Immigrants are required to bring with them a certificate issued by the judicial authorities of their country of origin, with the visa of the Argentine consular representative, certifying that they have not been prosecuted for any crimes against the public order (anarchism and other anti-government activities) or grave crimes. Partially suspended in 1919 since previous certificates may be replaced by “other documents” showing the good conduct and general capability of the immigrant.</td>
</tr>
<tr>
<td>1923</td>
<td>Decree modifying the 1876 Law and re-establishing the bans and regulations suspended in 1919. The above restrictions plus the requirement that all certificates must have a visa from the Argentine consul in the country of origin. Also bans beggars, unaccompanied women with children less than ten years of age and any other person who would seem likely to become a charge on the public.</td>
</tr>
<tr>
<td>1931</td>
<td>Head tax for immigrants that were not coming to work the land.</td>
</tr>
<tr>
<td>1932</td>
<td>Closed (or only slightly ajar doors). Open only to close relatives to foreign residents, immigrants with a labour contract and those proving to have enough financial means.</td>
</tr>
</tbody>
</table>

Appendix B
Independent Variables: Methods and Sources

IMRATE: Immigration Rate was calculated as total immigration divided by total population. Population data 1869-1913 from Vazquez Presedo (1988); 1913-1930 from Hofman (2000). Immigration data from Resumen Estadístico del Movimiento Migratorio en la República Argentina, 1857-1924, Buenos Aires, Dirección General de Inmigración, 1925. Data for 1923-27 come from “Movimiento general de extranjeros durante el quinquenio 1923-27” Dirección General de Estadística y Censos (mimeo). Missing data from Nascimbene (1987) Immigration composition by origin: main groups are Italy & Spain; Other Europeans (France, Great Britain, Germany, Switzerland and Belgium); Eastern Europeans (Austro-Hungary and Russia); Others (include the Ottoman Empire after 1919).

FORPOP: Percentage of foreigners over total population. From 1870 to 1913 estimation based on total annual population and net immigration.

IMRELIT: Immigrant literacy rates (weighted using the percentage of immigration from each region/country as the weight) relative to literacy rates in Argentina =1. Mitchell (1995) for 1870-1900; since 1900 Astorga et. al. (2003)

YTORW: GDP per capita relative to unskilled real wages. Real Wages from Williamson (1999); GDP per capita from Della Paolera et.al. (2003)

RY: Real GDP per capita. Della Paolera, et. al. (2003)

STRIKES: Number of strikes per year. From 1887 to 1906, Korzeniewicz (1989), table 1; from 1907 to 1930 official government statistics, Departamento Nacional del Trabajo, in Vázquez-Presedo (1988). See also McGuire (1996)

SUFFRAGE: Dummy variable with value 0 before 1912 and 1 from 1913 to 1930.
Appendix C: Econometric Tests (Table 2)

I have analysed the order of integration of the variables used, with the Augmented Dickey-Fuller test. All variables are integrated of order one, I(1), that is, its first difference does not contain a unit root. We reject the hypothesis of a unitary root at the 1 per cent confidence level. The results of the tests carried out are the following:

Table C-1 Variables in the Model: Order of Integration

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF test Level</th>
<th>ADF test First Differences</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMMPOL*</td>
<td>-2.8038</td>
<td>-7.9791</td>
<td>I(1)</td>
</tr>
<tr>
<td>IMRATE**</td>
<td>-3.0952</td>
<td>-7.9819</td>
<td>I(1)</td>
</tr>
<tr>
<td>FORPOP*</td>
<td>-2.1491</td>
<td>-3.5395</td>
<td>I(1)</td>
</tr>
<tr>
<td>IMRELIT*</td>
<td>-1.8899</td>
<td>-7.5016</td>
<td>I(1)</td>
</tr>
<tr>
<td>STRIKES**</td>
<td>-3.2044</td>
<td>-9.9784</td>
<td>I(1)</td>
</tr>
<tr>
<td>SUFFRAGE**</td>
<td>-0.6515</td>
<td>-7.6811</td>
<td>I(1)</td>
</tr>
<tr>
<td>RY*</td>
<td>-2.3658</td>
<td>-6.9748</td>
<td>I(1)</td>
</tr>
<tr>
<td>YTORW*</td>
<td>-3.7919</td>
<td>-8.9776</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

Notes: The ADF level tests have been considered with constant and linear trend* and with constant**.

The level of significance is in all cases at 1%

For the residual of each equation in levels I have computed the Augmented Dickey-Fuller test and found that it is always stationary so it can be concluded that the variables in the equation are cointegrated. The results are offered in Table A-2

Table C-2 Augmented Dickey-Fuller Test for the Equations’ Residuals

<table>
<thead>
<tr>
<th>Residuals</th>
<th>ADF test</th>
<th>p-values</th>
<th>Test critical values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t-Statistic</td>
<td>Prob.</td>
<td>1% level</td>
</tr>
<tr>
<td>Equation 1</td>
<td>-3.6610</td>
<td>0.0076</td>
<td>-3.5600</td>
</tr>
<tr>
<td>Equation 2</td>
<td>-3.9479</td>
<td>0.0034</td>
<td>-3.5627</td>
</tr>
</tbody>
</table>

Note: The ADF level tests have been considered with constant
<table>
<thead>
<tr>
<th></th>
<th>IMMPO</th>
<th>IMRATE</th>
<th>FORPOP</th>
<th>IMRELIT</th>
<th>STRIKES</th>
<th>SUFFRAGE</th>
<th>RY</th>
<th>YTORW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>5.98</td>
<td>1.92</td>
<td>22.21</td>
<td>1.03</td>
<td>81.59</td>
<td>0.34</td>
<td>109.70</td>
<td>0.79</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>6.00</td>
<td>1.51</td>
<td>22.82</td>
<td>0.95</td>
<td>64.50</td>
<td>0.00</td>
<td>108.40</td>
<td>0.81</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>10.00</td>
<td>6.70</td>
<td>29.90</td>
<td>1.58</td>
<td>367.00</td>
<td>1.00</td>
<td>158.42</td>
<td>1.44</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>2.00</td>
<td>0.16</td>
<td>12.37</td>
<td>0.69</td>
<td>1.00</td>
<td>0.00</td>
<td>52.78</td>
<td>0.49</td>
</tr>
<tr>
<td><strong>Std. Deviation</strong></td>
<td>2.66</td>
<td>1.29</td>
<td>4.96</td>
<td>0.21</td>
<td>86.88</td>
<td>0.47</td>
<td>28.21</td>
<td>0.18</td>
</tr>
<tr>
<td><strong>Skewness</strong></td>
<td>-0.094043</td>
<td>1.343305</td>
<td>-0.812366</td>
<td>0.742277</td>
<td>1.357898</td>
<td>0.678883</td>
<td>-</td>
<td>0.436815</td>
</tr>
<tr>
<td><strong>Kurtosis</strong></td>
<td>1.670342</td>
<td>4.918713</td>
<td>2.689233</td>
<td>2.712035</td>
<td>4.637109</td>
<td>1.460882</td>
<td>2.532107</td>
<td>4.326528</td>
</tr>
<tr>
<td><strong>Probability</strong></td>
<td>0.121977</td>
<td>0.000003</td>
<td>0.041074</td>
<td>0.069393</td>
<td>0.000008</td>
<td>0.007340</td>
<td>0.317955</td>
<td>0.007107</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td>335.0000</td>
<td>107.5513</td>
<td>1243.950</td>
<td>57.43942</td>
<td>4569.000</td>
<td>19.00000</td>
<td>6142.987</td>
<td>44.40226</td>
</tr>
<tr>
<td><strong>Sum Sq. Dev.</strong></td>
<td>388.9821</td>
<td>91.90464</td>
<td>1352.917</td>
<td>2.535946</td>
<td>415149.6</td>
<td>12.55357</td>
<td>43779.96</td>
<td>1.777813</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>56</td>
<td>56</td>
<td>56</td>
<td>56</td>
<td>56</td>
<td>56</td>
<td>56</td>
<td>56</td>
</tr>
</tbody>
</table>