On the Political Economy of Illegal Immigration

Ruxanda Berlinschi and Mara Squicciarini

LICOS Centre for Institutions and Economic Performance
K.U.Leuven

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Abstract

This paper provides an economic rationale for the presence of illegal migrants in many developed countries. Unlike natives or legal migrants, illegal migrants can be easily hired with informal contracts that do not respect all labour market regulations. When minimum wage regulations are binding, informal employment of illegal migrants has no effect on natives’ wages, but allows increases in production and capital revenues above the levels in which marginal labour productivity equals the minimum wage. Natives with sufficient capital holdings will then support immigration policies that tolerate a certain level of illegal immigration. Moreover - if migrants are on average poorer than natives - natives’ preference for illegal rather than legal immigration is reinforced in presence of a redistributive welfare system from which illegal migrants are excluded.

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“The reality is that if the government were able to stop everybody at the border, there would be no agriculture. You wouldn’t be eating asparagus.”

Walsh (1999)¹

“Illegal immigration is a persistent phenomenon in part because it has a strong economic rationale”

Hanson, (2007: 32)

“Policies designed to curb international migration benefit employers who hire undocumented migrants to avoid complying with existing pay and working conditions regulations”

Tacoli and Okali (2001)

1. Introduction

In a period of growing globalization and mobility among countries, illegal immigration has become a widespread phenomenon, that often covers the first page of newspapers and that is gaining importance in governments’ policy agendas. The collapse of communism, economic instability in emerging economies and more recently the Arab revolutions, have led to new inflows of illegal migrants in many western countries. Controversial feelings are associated with illegal immigration: a humanitarian desire to help people in need is opposed to the perception of illegal immigrants as a source of crime and terrorism and as a burden for host countries’ welfare systems.

The official position of all governments is that illegal immigration, together with organized crime, drug trafficking and terrorism, is a serious problem that needs to be combated. Various tools are used in this respect, from border patrols to sanctions for illegal employment of foreigners, deportations, regularisations, bilateral agreements for border patrols with the source

¹ Quoted in Hanson and Spilimbergo (2001)
country, biometric passports, and even, as has been observed recently, trying to get rid of the problem by granting temporary visas to new migrants and hoping they would then leave to other countries in the passport-free Schengen area. Such signals of strong commitment to combat illegal immigration may be appealing to the popular electorate, particularly during economic downturns at home or political unrest in source countries, as can be witnessed by the recent rise of anti-immigrant parties across Europe.

Despite these official positions, recent estimates suggest that illegal immigration is a deeply-rooted and widespread phenomenon in many western countries. In 2008, the estimated stock of illegal migrants was 1,200,000 in the United States, which represented 32.4% of the foreign population, 650,000 in Italy (22.1% of the foreign population), 725,000 in the UK (11.1% of the foreign population), 570,000 in Spain (10.9% of the foreign population) and 250,000 in Greece (43.8% of the foreign population), (Fasani, 2009). This may have two explanations: either governments are unable to reduce illegal immigration (due technical or financial constraints), or they are unwilling to do so, contrarily to their official declarations. This paper argues that the second reason is part of the explanation.

Most illegal migrants participate in the host country’s economy. They represent a significant source of labour supply, particularly in low-wage sectors such as agriculture, construction, food processing, restoration and home care. These sectors would be severely hurt if they were deprived of unauthorised migrants’ labour force. Interest groups in these sectors may therefore lobby governments to turn a blind eye on illegal immigration. But if these

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2 In The Seattle Times, http://seattletimes.nwsource.com/html/localnews/2003265139_imprices19.html (last accessed: 21/04/11) September 19, 2006, we read: ““We've got a lot of jobs that are tough to fill,” said Dan Mount, who teaches hotel management at Penn State. "To find someone who's going to clean 16 guestrooms a day for $6 or $7 an hour — people aren't lining up for those jobs." Illegal workers help close the gap. According to Pew's Passell, 22 percent of maids and housekeepers (including domestic help) are in the United States illegally."
industries need labour supply, why don’t governments meet their needs with legal migration? Instead of tolerating illegal immigrants, governments could simply offer more visas to thousands of Mexicans, East Europeans or North Africans willing to work in a Western country. While part of the answer to this question may be electoral, as argued by Facchini and Testa (2010), we think that there are also non-negligible economic explanations. First, the illegal status of migrants benefits the employers, since illegal migrants can easily be hired for poor wages and below-norms working conditions\(^3\). Second, the illegal status of migrants benefits public finances in the host country, since most social welfare benefits are conditional on legally residing in the host country (OECD, 1999). The aim of this paper is to formalise these arguments using standard economic theory tools.

This paper is related to the literature on the impact of migration on the host country and on the political economy of immigration policies. The seminal paper by Borjas (1995), shows that if migrants bring no capital with them, immigration increases total income in the host country, but also generates a redistribution of wealth from labor to capital revenues. If migrants bring some capital with them, the impact on immigration on total income of natives and on its redistribution between labour and capital owners is lower. A number of papers have developed political economy models explaining the formation of immigration policies. Benhabib (1996) analyses how immigration policies that impose capital requirements to migrants would be determined under majority voting, when natives differ in their capital holdings. Facchini and Willman (2005) model policies restricting international factor mobility when domestic groups bid for protection and the government maximizes a welfare function that depends both on voters’

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\(^3\) Some of these working conditions for illegal immigrants are described by the Italian newspaper La Repubblica on 2010/02/01. According to the article, 80% of illegal workers work on Saturdays and 31.8% also on Sundays. 38% of them work also during the night (against 22% among legal immigrants). 40% of them gain less that 5 euros per hour (against less than 10% among legal migrants).
welfare and on contributions from the interest groups. Epstein and Nitzan (2006) analyze the determination of migration quotas in a contest between workers and capital owners, whose preferences towards immigration are exogenously given and where the government’s objective function is a weighted sum between total welfare and lobbying transfers received. In their model, lobbying enhances compromise when the government does not intervene in the policy proposal, but may lead to extreme policies when the government intervenes in the policy proposal. An increase in the weight given by the government to social welfare may either increase or decrease the migration quota, depending on its impact on lobbying efforts by each group. All these papers only considered legal migration.

Another strand of the literature has analysed optimal policies when the government wants to limit the flow of illegal immigration. The pioneering paper of Ethier (1986) analyses the effectiveness of border versus internal enforcement in combating illegal immigration. In that model, skilled and unskilled workers are used to produce a final good via a neoclassical production function. Illegal immigrants increase the supply of unskilled workers. Firms employ unskilled labour up to the point in which the wage equals the marginal labour productivity. In absence of wage rigidities, illegal immigration reduces the unskilled wage and increases the skilled wage. In presence of wage rigidities, it increases unskilled unemployment rate without affecting the skilled workers. Border enforcement, modelled as the probability for an illegal entry attempt to fail, determines the supply of illegal migrants. Internal enforcement, modelled as the probability for a firm employing an illegal worker to be caught and pay a fine, determines the wage gap between illegal migrant and unskilled legal workers. The model shows that using a mix of border and internal enforcement is less costly than using only one of type of enforcement. Woodland and Yoshida (2006) extend Ethier’s setting to a two-country context, distinguishing
between the cases of capital mobility and capital immobility and relaxing the assumption of immigrants’ risk neutrality. They show that non-neutral attitudes to risk may lead to multiple and unstable equilibria. Illegal immigration is reduced by tighter border control and greater internal enforcement. The effect of these policies on the origin country’s wage rates depends on the degree of capital mobility and the effect of internal enforcement on the host country’s illegal wage rate depends on immigrants’ attitude to risk. Chau (2001) analyses the role of amnesty policies. The paper argues that amnesty programs may allow the authorities to increase welfare by binding their own hands when border and internal enforcement policies are time-inconsistent. All these early papers on illegal immigration rest on the assumption that illegal immigration is always undesired and governments are willing to fight it.

More recent papers on illegal immigration have considered the hypothesis that some level of illegal immigration may be deliberately tolerated by governments. Hillman and Weiss (1999) explain permissible illegal immigration in an endogenous policy model in where illegality denies immigrants the possibility to freely choose their occupation, making illegal migrants become sector-specific factors of production. In that setting, the median voter opposes immigration under initial conditions where no immigrants are present. However, when a population of illegal immigration has accumulated, the median voter supports increases in illegal immigration, opposes amnesty of existing illegals and opposes increases in legal migration. Hanson and Spilimbergo (2001) examine the correlation between sectoral shocks and border enforcement in the United States. The authors find that border enforcement falls following positive shocks in the sectors that are intensive in the use of undocumented labour. They argue that this finding is consistent with a political economy model in which the level of border enforcement chosen by the authorities is affected by lobbying by different interest groups. Fasani (2009) examines the
impact of changes in labour demand on the intensity of deportations of illegal migrants from Italy. He finds a negative and significant effect of local employment on deportations. The author argues that this argument is consistent with a political economy model in which the government maximizes a weighted sum of workers’ and firms’ utility, in presence of labour market rigidities. Finally, Facchini and Testa (2010) use a political agency framework to show how illegal immigration arises endogenously as a strategic choice of elected officials that face a trade-off between pleasing the voters and pleasing a pro-immigration lobby. When the policy makers have an information advantage over the public on immigration supply, they announce a certain immigration quota to please the majority but then they relax the enforcement level in order to please the lobby, which leads to illegal immigration.

Our paper follows this recent line of research, i.e. it provides a political-economic rationale for permissive immigration policies. To the best of our knowledge, we are the first to suggest that minimum wage regulations may be one of the drivers of such policies. While several papers in this literature have acknowledged the existence of wage rigidities in the sectors that employ illegal migrants (e.g. Ethier, 1986), no study has considered the hypothesis that employers of illegal migrants may not respect this regulation. We show that introducing this hypothesis in a standard immigration model à la Borjas (1995) is sufficient for rationalizing permissive illegal immigration by the host country. Contrarily to Borjas (1995), we show that an immigration surplus may arise also when natives’ wage does not fall as a result of immigration.

We define migration policy as the number of legal and illegal migrants that are allowed to participate in the economy and we assume that only illegal immigrants can be employed informally. In the benchmark case of perfectly competitive labour markets, we show that natives’ preferred level of illegal migration is zero and their preferred level of legal migration increases
with their capital holdings. In the realistic case of labour markets constrained by a minimum wage regulation, informal employment of illegal migrants allows increases in employment and production above the level at which marginal labour productivity equals the minimum wage. The resulting additional production leads to capital revenues for natives, with no effect on their wages, protected by the minimum wage regulation. Therefore, migration policies that tolerate a certain level of illegal immigration are supported by natives with sufficient capital holdings and implemented by governments who put a sufficient weight on pleasing the capitalists. We extend the model by considering a redistributive welfare system from which illegal immigrants are excluded and we show that the existence of such welfare system reinforces capitalists’ support for illegal immigration.

The structure of the paper is as follows. Section 2 presents the model. Section 2.1 considers the benchmark case of competitive labour markets. Section 2.2 considers the case of a minimum wage regulation. Section 3 presents the extensions and section 4 concludes.
2. The Model

We consider an economy populated by \( N \) native individuals, indexed by \( i \). They are all endowed with one unit of labour, but they differ in the amount of capital they own, \( k_i \geq 0 \), where \( \sum_{i=1}^{N} k_i = K \). One final good \( Y \) is produced by competitive firms with a Cobb-Douglas production function, \( Y = K^\alpha L^{1-\alpha} \), where \( K \) is the quantity of capital and \( L \) is the quantity of labour used in production. The price of the final good is normalized to one.

Migration policy is defined as couple \((M, I)\), where \( M \) is the number of legal migrants and \( I \) the number of illegal migrants that are allowed to participate in the economy\(^4\). All migrants are endowed with one unit of labour and do not own any capital. Natives, legal and illegal migrants are perfect substitutes in the production function. Thus, labour supply for a migration policy \((M, I)\) is \( L = N + M + I \).

The utility of native \( i \) is given by:

\[
U_i = w^*(K, L) + k_i r^*(K, L) - \frac{1}{2} \gamma (M + I)^2 - \frac{1}{2} \varphi I^2,
\]

where \( w^*(K, L) \) and \( r^*(K, L) \) are respectively the equilibrium wage and the interest rate, and \( \frac{1}{2} \gamma (M + I)^2 \) and \( \frac{1}{2} \varphi I^2 \) are the non-economic costs of total and illegal migration, with \( \gamma \geq 0 \) and \( \varphi \geq 0 \).\(^5\)

Let us analyse the migration policy preferred by native \( i \). First, we determine the equilibrium wage and interest rate for a given migration policy \((M, I)\). Second, we compute voter

\(^4\) The tools used by governments to implement a specific migration policy range from visa quotas, to border enforcement, internal enforcement and labour market regulations concerning migrants. Our interest here is not the choice among different policy tools for a desired immigration level, but rather the choice of the migration levels. Therefore we abstract from the link between policy tools and immigration policy outcomes.

\(^5\) A number of studies have shown that individual attitudes towards migration are shaped by both economic and non-economic determinants. In particular, concerns regarding the impact of migration on crime rates, individual perceptions about the cultural effects of foreigners and racist feelings affect migration attitudes (Mayda, 2006). As these negative feelings are likely to be stronger towards illegal aliens, we introduce a utility cost specific to illegal immigration. Note that assuming \( \varphi \geq 0 \) makes the preference for illegal migrants more unlikely. Our results would only be reinforced without this term.
i’s preferred migration policy, denoted \((M_i, I_i)\), by maximising (1) with respect to \(M\) and \(I\). Finally, we will consider a simple political-economy model that aggregates individual preferences into policy outcomes.

In section 2.1 we consider the benchmark case in which wages and interest rates are determined competitively. In section 2.2 we consider the more realistic case in which the labor market is constrained by a minimum wage regulation.

2.1 Migration Policy in Absence of a Minimum Wage Regulation

We assume in this section that wages and interest rates are determined competitively. In equilibrium, they are equal to the marginal productivity of labour and capital respectively:

\[
w^* = (1 - \alpha) \left(\frac{K}{L}\right)^\alpha
\]

\[
r^* = \alpha \left(\frac{L}{K}\right)^{1-\alpha}
\]

Let us determine native \(i\)’s preferred migration policy \((M_i, I_i)\). First, it is easy to see that \(\forall i, I_i = 0\), i.e. native \(i\)’s preferred migration policy implies zero illegal migration, independently of his capital stock. From (1), (2) and (3), we can see that to any policy \((M, I)\) allowing \(I\) illegal migrants, native \(i\) strictly prefers the policy \((M + I, 0)\), that allows the same total number of migrants, but where all migrants are legal. The reason for this is the following. Native \(i\)’s revenues \(w^*\) and \(r^*\) only depend on the total number of migrants, but illegal migrants induce a higher non-economic cost. In this case a migration policy allowing illegal immigration cannot be optimal, since the utility of all natives could be increased by keeping the total number of migrants constant and replacing illegal migrants with legal ones.
Let us now determine native $i$’s preferred level of legal migration, $M_i$, taking into account that $I_i = 0$. As migration increases labour supply $L$ and leaves the capital stock unchanged, we can see from (2) and (3) that migration decreases labour revenues and increases capital revenues. The net impact of migration on individual $i$’s revenues depends on his capital stock $k_i$. This is a well-known result in the migration literature and it is summed up in Proposition 1.

**Proposition 1:** When markets are competitive, native $i$’s preferred migration policy is $(M_i, 0)$, where the level of legal migration $M_i$ increases with his capital stock $k_i$ and decreases with the non-economic cost of migration $\gamma$.

**Proof.** First, it is straightforward to check that $\frac{\partial U_i}{\partial M} > 0 \iff k_i > f(M)$, where $f(M) \equiv M(N + M)^{1-\alpha} \gamma / \alpha (1 - \alpha) + K / (N + M)$. Second, it is easy to check that $f'(M) > 0 \iff (N + M)^{\alpha} [N + (1 - \alpha)M] > K^\alpha \alpha (1 - \alpha) / \gamma$. The left hand side of the last inequality is an increasing function of $M$. Thus, $f(M)$ is first decreasing, then increasing in $M$ and the inequality $k_i > f(M)$ is satisfied for intermediary values of $M$. Therefore the utility of native $i$ is first decreasing, then increasing, and then decreasing again in the level of legal migration $M$. From these inequalities, simple comparative statics imply that an increase in $k_i$ increases the optimal level of migration for individual $i$, while an increase in $\gamma$ decreases it.

**End of the proof.**

How do these individual preferences over immigration policies aggregate into policy outcomes? A simple way of answering this question is to assume a particular distribution of capital and a reduced-form political economy model. Assume for simplicity that the capital stock $K$ is equally distributed among a fraction $\mu$ of natives, while the other fraction, $1 - \mu$ only have
labour endowments. Call these two groups capitalists and workers respectively. Thus $k_i = K/\mu N$ is $i$ is a capitalist and $k_i = 0$ if $i$ is a worker.

Consider a simple political-economy model in which the government maximises a welfare function equal to a weighted sum of the two groups’ welfare:

$$W_G = (1 - \pi)w^*(K, L) + \pi[w^*(K, L) + (K/\mu N)r^*(K, L)] - 1/2\gamma M^2,$$

where $\pi$ is the weight that the government attaches to the welfare of capitalists. This weight may depend on government’s own ideological preferences, on its interest in being re-elected and on lobbying efforts by each group, which we do not explicitly model. The share of capitalists $\mu$ may have either a positive or a negative impact on the weight that the government puts on the welfare of capitalists, $\pi$. A government whose decisions are highly influenced by electoral concerns should put a low weight on the welfare of capitalists when their number is low in order to get as many votes as possible. A government whose decisions are highly influenced by lobbying may put a high weight on the welfare of capitalists when their number is low, since smaller groups are more likely to organise in lobbying activities than larger groups, due to free riding.

As illegal immigration is not supported by any native, the government maximises $W_G$ with respect to $M$, taking $l = 0$. Then, following the exact same steps as in Proposition 1, it is easy to check that the level of legal migration chosen by the government, $M^*$, increases with $\pi$ and $K$ and decreases with $\gamma$.

We have shown in this section that when markets are competitive, there is no rationale for allowing illegal immigration since no native worker would support such a policy. The level of legal migration depends positively on the weight of capitalists in government’s welfare function and negatively on the non-economic cost of migration.
2.2 Migration Policy in Presence of a Minimum Wage Regulation

Consider now the more realistic case in which wages are constrained by a minimum wage regulation, $w_{\text{min}}$. If labour supply $L$ is such that the competitive equilibrium wage exceeds the minimum legal wage, i.e. $w^*(K,L) > w_{\text{min}}$, the regulation is not binding and the equilibrium wage is the competitive one. If labour supply $L$ is such that $w^*(K,L) < w_{\text{min}}$, the regulation is binding and the equilibrium wage is the minimum legal wage.

Minimum wage regulations exist in many developed countries. However, anecdotal and empirical evidence suggests that these regulations are not often respected in the case of illegal migrants. As these persons do not have any official existence in the host country, they do not have the right to work and are usually employed informally, without paid holidays, medical insurance and for wages often lower than the minimum legal wage. Such informal employment also exists among natives and legal migrants, but it is much less frequent than in the case of illegal aliens. One of the reasons for this is that natives are rarely willing to accept such poor working conditions, while legal migrants usually need to show formal employment contracts and payrolls to the authorities in order to keep their legal status. We introduce this stylised fact in the model by assuming that only illegal immigrants are willing to accept wages lower than the minimum legal wage.

As in the previous section, we first determine the equilibrium wage and interest rate for a given migration policy $(M,I)$, then we analyse native $i$’s preferred migration policy and the migration policy chosen by the government.

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6 In a study of the Urban Institute Immigration (US) they show that ‘Undocumented workers earn considerably less than working U.S. citizens. About two-thirds of undocumented workers earn less than twice the minimum wage, compared with only one-third of all workers.’
Denote by $L_{\text{max}}$ the maximum number of workers that can be employed with a formal working contract. $L_{\text{max}}$ is such that marginal labour productivity is equal to the minimum wage:

$$(1 - \alpha)(K/L_{\text{max}})^{\alpha} = w_{\text{min}}.$$ Note that $L_{\text{max}}$ decreases with $w_{\text{min}}$.

Any migration policy $(M, I)$ such that $N + M + I < L_{\text{max}}$ implies that that all workers present in the country can be employed formally. In this case, the equilibrium production, wage and interest rate only depend on the total number of migrants $M + I$. The equilibrium wage and interest rates with such a policy are the competitive ones, given by (2) and (3).

Any migration policy $(M, I)$ such that $N + M + I > L_{\text{max}}$ implies that not all workers present in the country can be employed formally. Since only illegal workers can be employed informally, the equilibrium production, wage and interest rate will depend not only on the total number of migrants $M + I$, but also on the number of illegal migrants $I$. Three cases are possible: $N + M > L_{\text{max}}$, $N + M < L_{\text{max}}$ and $N + M = L_{\text{max}}$.

Consider first a policy $(M, I)$ such that $N + M + I > L_{\text{max}}$ and $N + M > L_{\text{max}}$. In this case, the marginal productivity of the last legal migrant is lower than the minimum legal wage. Then, depending on labour market regulations in the host country, i.e. whether or not preference has to be given to native workers, either all natives are employed and $M - (L_{\text{max}} - N)$ migrants are unemployed, or all natives and migrants are employed with probability $L_{\text{max}}/(N + M)$ and unemployed with probability $1 - L_{\text{max}}/(N + M)$. One can easily see that such a policy cannot be optimal. Any native $i$ would strictly prefer the policy $(L_{\text{max}} - N, I)$ to $(M, I)$. Indeed, decreasing the number of legal migrants from $M$ to $L_{\text{max}} - N$ and keeping the number of illegals unchanged would not modify the number of workers participating in the labour force, so wages and interest rates would not be affected, but unemployment and the non-economic cost of migration would be reduced, so the utility of all natives would be higher.
Consider second a policy \((M, I)\) such that \(N + M + I > L_{\text{max}}\) and \(N + M < L_{\text{max}}\). In this case, the marginal productivity of the last legal migrant is higher than the minimum legal wage, and the marginal productivity of the last illegal migrant is lower than the minimum legal wage. Such a policy cannot be optimal either, as all native would strictly prefer the policy \((L_{\text{max}} - N, I - (L_{\text{max}} - N - M))\) to \((M, I)\). Indeed, replacing the first \(L_{\text{max}} - N - M\) illegal migrants with legal migrants would not change the equilibrium wage and interest rates, but it would reduce the cost associated with illegal immigration.

Consider finally a policy such that \(N + M + I > L_{\text{max}}\) and \(N + M = L_{\text{max}}\). Then the equilibrium wage of natives and legal migrants is \(w_{\text{min}}\). Illegal migrants are paid at their marginal productivity, i.e.:

\[
w_i(I) = (1 - \alpha) \left( \frac{K}{L_{\text{max}} + I} \right)^\alpha < w_{\text{min}}.
\]

The equilibrium interest rate in presence of \(I\) illegal migrants is denoted \(r^*(I)\). We compute it by dividing total capital revenues, equal to total production minus total labour remuneration, by the number of units of capital present on the market.\(^7\) The total production is given by:

\[
Y(K, L_{\text{max}} + I) = K^\alpha (L_{\text{max}} + I)^{1-\alpha}. \tag{4}
\]

Total labour remuneration is equal to \(L_{\text{max}}w_{\text{min}} + Iw_i(I)\). Thus, total capital remuneration is given by:

\[
K \cdot r^*(I) = K^\alpha (L_{\text{max}} + I)^{1-\alpha} - L_{\text{max}}w_{\text{min}} - Iw_i(I). \tag{5}
\]

By rearranging the terms and replacing \(L_{\text{max}}\) with its value, this gives:

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\(^7\) With a constant returns to scale production function and competitive firms, profits are zero and the entire production is split between labour and capital revenues.
We can now compute native $i$’s preferred migration policy. Proposition 2 summarises the results.

**Proposition 2:** When labour markets are constrained by a minimum wage regulation $w_{\text{min}}$, native $i$’s preferred migration policy is $(M_i, I_i)$, where the level of legal migration $M_i \leq K((1 - \alpha)/w_{\text{min}})^{\frac{1}{\alpha}} - N$ increases with $k_i$ and decreases with $\gamma$ and the level of illegal migration $I_i$ increases with $k_i$ and decreases with $\gamma$ and $\varphi$.

**Proof:** See appendix.

Thus, in presence of a minimum wage regulation, natives with sufficient levels of capital may desire a positive level of illegal immigration. Moreover, the total number of migrants preferred by voter $i$ may be higher in presence of a minimum wage regulation, since the negative effect on natives’ wages is limited. This is clear also by looking at Figure 1 which shows the labour and capital revenues when minimal wage regulations are binding and illegal migration is allowed.

How do these preferences aggregate into a policy outcome? Assume the same capital distribution and government objective function as in the previous section. It is then easy to see that if the government puts a sufficient weight on the welfare of capitalists, it will induce a positive level of illegal immigration.

\[
r^*(I) = K^{\alpha-1} \left[ \left( \frac{K(1 - \alpha)}{w_{\text{min}}} \right)^{\frac{1}{\alpha}} + I \right]^{-\alpha} \left[ \left( \frac{K(1 - \alpha)}{w_{\text{min}}} \right)^{\frac{1}{\alpha}} + \alpha I \right] - (1 - \alpha)^{\frac{1}{\alpha}} w_{\text{min}}^{\frac{\alpha-1}{\alpha}}.
\]
This section has provided a political-economic rationale for allowing illegal migrants to participate in the economy. The following section suggests other political economic reasons that could explain the tolerance of illegal immigration in many countries.

3. Extensions

In this section we extend the model in two directions. First, we include in the basic model a redistributive welfare system and second we consider the possibility that legal migrants bring some capital with them.
3.1 Redistributive Welfare System

We can think of a redistributive welfare system in which the state taxes labour and capital revenues and equally redistributes the tax receipts to all legal residents. Following Facchini and Mayda (2009), we model the welfare system as a flat tax rate \( \tau \) on capital and wage revenues and a lump sum transfer \( b \) to all legal residents in the economy. Per capita transfers \( b \) are exogenously given, while the tax rate \( \tau \) adjusts to keep the government budget constraint in equilibrium.

Natives and legal immigrants pay taxes and have access to the transfers \( b \). Illegal immigrants do not pay taxes and do not get any transfers, so they do not affect the welfare system\(^8\).

Thus, the government budget constraint can be written:

\[
\tau(w^*(K, L)(N + M) + r^*(K, L)K) = b(N + M)
\] (7)

Let us determine the impact of legal migrants \( M \) on the tax rate \( \tau \), i.e. the sign of \( \partial \tau / \partial M \). After expressing \( \tau \) from (7), it is easy to check that \( \partial \tau / \partial M > 0 \). Indeed, \( \partial \tau / \partial M > 0 <\Rightarrow Kr^* > (N + M) \partial w^* / \partial M + K \partial r^* / \partial M \). As \( \partial w^* / \partial M \leq 0 \), a sufficient condition for this to be satisfied is \( r^*/(N + M) > \partial r^* / \partial M \), which, after replacing \( r^* \) with its value, is equivalent to \( \alpha < 1 \).

Thus, while illegal migrants do not affect the welfare system, legal migrants induce an increase in tax rates, for given benefits. This may be an additional explanation for the tolerance of illegal immigration in many countries.

\[8\] Although illegal migrants are excluded from social welfare systems such as unemployment or retirement programs, or social transfers to poor families, they do have access to some basic public services. For example, they do use the roads, parks, electricity and water delivery systems which are usually subsidized by the state. In some countries they also have access to public health and education. However, infrastructure services are public goods, so their use by some additional migrants has only a negligible impact on the consumption of these services by the nationals. Education and health services are public goods to a lesser extent, since agglomeration costs arise more quickly, but most illegal migrants avoid the use of these services in order to avoid being caught by the authorities.
3.2 Immigrants’ capital supply

Consider the possibility that migrants bring some capital with them. A plausible assumption could be that only legal migrants bring their capital with them in the host country, since illegal migrants are unlikely to open bank accounts and place their money in a country where they have no legal existence. In this case, legal immigration increases both the capital supply and the labour supply, while legal immigration only increases labour supply.

Consequently, legal migrants have a lower negative impact on wages and a lower positive impact on interest rates than illegal migrants. Capitalists would then prefer a higher number of illegal immigrants. If the government puts a high weight on the welfare of capitalists, it should tolerate a significant level of illegal immigration.

4. Conclusion

This paper provides an economic rationale to the presence of illegal immigrants in many developed countries. We argue that in presence of binding minimum wage regulations, increases in production and capital revenues can only be obtained by informally employing illegal migrants at lower wages. When capitalists have a sufficient influence on policy making, either through lobbying or for ideological reasons, some level of illegal immigration will be purposely tolerated by the authorities.

The argument of permissive illegal immigration for political-economic reasons can be extended in two directions. First, by including a redistributive welfare system from which illegal migrants are excluded and second, by allowing the possibility that legal migrants bring capital with them. These two possibilities increase capitalists’ support for illegal immigration.
References


Appendix.

Figure 2: Utility of native $i$ in absence of non-economic costs of migration.

\[ U_i, \gamma = 0 \]

Figure 3: Utility of native $i$ with a positive non-economic costs of migration.

\[ U_i, \gamma > 0 \]
Figure 4: Utility of workers and capitalists with a positive non-economic costs of migration