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Are government policies efficient to regulate immigration? Evidence from France

Albert MILLOGO[*]
Ines TROJETTE[**]
Nicolas PÉRIDY[***]

Abstract - This paper explores the effects of immigration policies on migration inflows from 141 countries to France over the period 1995-2014. The main contribution of the paper holds in the estimates of policies based on the changes of French legislation up to 2014. We adopt a common correlated error model that is consistent under the assumptions of heteroscedasticity and endogeneity due to multilateral resistance. We found that two opposite effects interact: admission policies failed to regulate migration flows whereas, integration policy seems to have been more efficient. In particular, estimates suggest that regulation changes benefited the most to foreign workers rather than other categories. Finally, it appears that asylum inflows do not significantly respond to regulations. The robustness estimates using DEMIG project's data reveal some significant differences in measuring the restriction of policies, that confirm the relevance of our indicators.

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Key-words
Immigration policy
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[*] Université Norbert Zongo, Koudougou, Burkina Faso ; albert.millogo@unz.bf
[**] ESPI Paris; i.trojette@groupe-espi.fr
[***] LEAD, Université de Toulon; nicolas.peridy@univ-tln.fr

INTRODUCTION

Immigration has recently become the second major concern for citizens after unemployment in France, United Kingdom, Spain, or the United States of America. OECD countries have hosted almost five million permanent migrants in 2016. The European Union (EU) had recorded more than 3.2 million asylum seekers applications for international protection since 2015. France and Germany are the main destinations of asylum seekers in the EU with respectively 325,370 and 40,575 positive decisions in 2017 (Eurostat). Most of them were fleeing from war and terror in Syria, Iraq and other unstable countries. These new trends in international migration have caught the attention of European governments on the necessity to move towards harmonized immigration policies. Given the sudden, and often illegal nature of this phenomenon, it has not been possible, at European level, to anticipate these flows of refugees.

Despite controversies related to asylum deny for a large number of demanders (it was the case in France and United Kingdom in 2016), the management of immigration through government policies is not a new concern. In the 2000s, the question of illegal migration, combined with persistent unemployment, have forced EU countries to reconsider their migration policies. While skilled migration has recently been encouraged, most EU countries have implemented more restrictive policies for unwanted migration. From 2003 to 2012, the former French President, Nicolas Sarkozy has implemented a chosen immigration policy. However, the number of immigrants has still been growing up. This observation leads to question the efficiency of immigration policies. In other words, have policies been efficient to regulate migrations inflows? In this regard, France is a particularly an interesting case study, first because this country is one of the main immigration country in Europe and second because it has tightened its migration policy in the 2000s.

Measuring migration policies remain a very complex task for economists (See Raypp et al. (2017) for further details on the main existing indicators and methodologies). Migration policies have recently been incorporated in empirical models. They reinforced the power of gravity models applied to migration issues (Ortega and Peri, 2009). In addition, Benhabib (1996) and Bianchi (2013) have provided theoretical evidence of the cutting down effects of tight policies on inflows through migration costs. Indeed, tight policies may lead to require more documents and upper skills. As a result, these policies increase migration costs and contribute to discourage some potential migrants.

Subject to criticism, the indicators of migration policies actually present some shortcomings related to their reliability. In this regard, two methods are commonly adopted to develop the measures of policies. The first method, common to several studies (Hatton, 2005 ; Karemera, Oguledo and Davis, 2000 ; Vogler and Rotte, 2000), generates "dummies" to assess the time specific effects for the years marked by structural changes in migration policies. However, these specific time dummies do not fully isolate the effects of policies from other factors. The second method aims to create a variable tabulated on the level of restriction. For this purpose, there is a need to properly define the range of possible values for this variable (Thielemann, 2004 ; Ortega, 2005). However, the value and scale of these variables are often based on the own assessment of the authors. Therefore, the quality of these indexes must be improved.

The majority of the empirical studies related to developed economies confirms that policies are worthwhile to explain migrations. Considering a sample of 91 source countries, Belot & Hatton (2012) showed that migration policies have significant effects on skill composition. Their results suggest that the size of the welfare State has a negative selection effect, whereas the transferability of specific skills has

a positive effect on skills composition[1]. Compiling bilateral migration datasets between 30 developed countries, Beine et al. (2019) find that integration policies, like Schengen agreements, accelerated the intensity of bilateral migration flows, in particular international workers in a sample of European countries.

Other studies consider policies as a cornerstone of migration decision. One of the first approach towards policy measurement was by Clark et al. (2007) who found that migration policies explain the variation of migrants composition in the United States. Boussichas & Goujon (2010) built indexes of migration policies restrictiveness depending on non-political factors, for 18 industrialized countries and find significant differences across them. In the same vein, Ortega & Peri (2013) analyzed the effects of policies on international migration flows using a sample of 15 OECD destination countries and 120 sending countries from 1980 to 2006. They found that tight admission laws towards immigrants may quickly reduce the inflows.

When analyzing policies from the destination side, a growing number of papers, as Czaika & De Haas (2013), suggest that there is often a gap between policies and practices. Explaining this gap is helpful to better understand the effects of policies. At first sight, understanding migration policy seems trivial, but we have to define it clearly. Let start explaining what we call "immigration policies". Following Bjerre et al. (2015), we can define immigration policy as government's statements of what it intends to do or not do (including laws, regulations, decisions or orders) with regards to the selection, admission, settlement and deportation of foreign citizens residing in the country. International migration regulation is to some extent a result of decisions from receiving countries. They do select the number of immigrants as well as the conditions to fill before for admission into the national borders. A good knowledge about how regulation allows to manage immigration seems necessary to quantifying the changes in policies. In this regard, the interaction of lobbies and political groups sometimes contribute to target multiple objectives which lead to ineffective laws. In fact, barriers to migration are lower in sectors in which business interest groups incur larger lobbying expenditures and higher in sectors where labor unions are more important (Facchini, Mayda and Mishra, 2011). The gap seems quite common between speeches and actions in migration regulation as they often meet electoral needs. The management of immigration is thus very influenced by political decisions because policies are validated by specific laws.

This paper contributes first to the empirical literature by providing three indexes of policies which measure changes in the restrictiveness of admission, integration and asylum from 1995 to 2014[2]. Results show that policies do not affect in the same way total immigration, workers, and asylum inflows. The indexes are constructed following the sub-steps (conceptualization, measurement, and aggregations) of Munck & Verkuilen (2002). The majority of studies identify the year of the major change using dummy variables (for example, Ortega & Peri (2009) and Mayda (2010) for OECD countries). Our indexes vary from one year to the following if a change occurs in the legal decisions related to the corresponding dimensions. In addition, we computed a dummy variable to identify and estimate the effect of a visa waiver program on immigration. For this purpose, we use EU member's adhesion dates and look for the countries that have bilateral free visa agreements with France (see Annex 4).

[1] Belot and Hatton (2012) assessed the effects of policies on the skill composition rather than the total number of migrants. Their sample gathers 70 source countries and 21 OECD destination countries over the period 2000-2001.

[2] The indicators are weighted and scaled using the changes in French laws and decrees as well as their expected effects. In addition, rather than explaining the variations in total immigrant's inflows only, we analyze separately the flows of foreign workers and asylum seekers.

The second contribution of this paper is the result obtained using DEMIG indexes, which are the most complete indicators of immigration policies (De Haas, Natter and Vezzoli, 2014, 2015). We run robustness estimations using 2 indexes of DEMIG project: the restrictiveness of policies and the magnitude in changes of the policies in France. Our results suggest that we should distinguish the overall impact of policies with regard to their restrictiveness and the changes in their magnitude. The implementation of the major changes in policies' restrictiveness negatively impacts immigrant inflows whereas the magnitude of changes is not significant. In other words, when we assess the impact of policies regarding the share of immigrants concerned, we find that most restrictive policies are associated with decreasing immigration. However, regarding the asylum inflows, it appears that tight policies are positive and significant, but the magnitude of the change expected is negative. As a result, policies are not the main drivers of the variations of asylum inflows.

Our data covers migration to France originating from a panel of 141 countries (European and non-European) over the period 1995-2014. As already mentioned, we use 3 dependent variables corresponding respectively to the total inflows of foreign population, the inflows of foreign workers, and the inflows of asylum seekers. We consider a set of explanatory variables, covering economic, demographic and geographic factors, as well specific factors determining the choice of location.

The migration decision, at the individual level, follows a RUM[3] which is a modern approach of individual location choices based on the individual behavior model of MacFadden (1973). The model is estimated in section 3, using CCE (common correlated error) structure with panel fixed effects. The cross-section independence in the residuals of the regression is checked via the CD test[4] by Pesaran (2004) and Pesaran (2015). Following this model, we test for cross-sectional dependence after applying the CCE, and adopt a pooled OLS estimator with Driscoll & Kraay standard errors when we fail to reject the dependence.

This article is organized as follows. The second section develops the theoretical model of migration. The third section presents the indicators of French immigration policies. The fourth section concerns the empirical model, and data. The fifth section provides the results of estimation and robustness checks. The sixth, and final section concludes the paper.

1. THE MODEL

The present section reviews the theory of immigrant's selection behind the empirical model. It contains two sections in order to distinguish the traditional and the modern approach of migration decision. The first subsection presents the traditional approach and the second the random utility maximization model.

1.1. Theoretical foundations

Borjas (1988) provides a fundamental contribution to the literature on immigrants selection. Following this approach, we adopt a microeconomic approach of income functions respectively in the country of origin (0) and country of destination (1). The wages at origin and destination are respectively w_0 and w_1. The model also incorporates some measures of socio-economic factors: social transfers, the domestic average income, the anticipated average income at destination, unemployment

[3] Recent empirical articles refer to the RUM model in the analysis of migration. For example, Docquier et al. (2014) identify the potential determinants of cross-country migrations, Kone et al. (2018) analyze internal migration patterns in India. More recently, Marchal & Naiditch (2020) propose a theoretical framework using a RUM model to show that the borrowing constraint matters in migration decision.

[4] A cross-section dependence test by De Hoyos & Sarafidis (2006) is available in Stata.

rate, age dependent population. It allows therefore to estimate the weight of economic constraints in emigrants' function of decision. In addition, it includes the influence of constraints such as migration policy and migrant networks. Formally, incomes in the home and destination countries follow the distribution as described by:

$$\ln(w_0) = \lambda_0 + \varepsilon_0 \quad (1)$$
$$\ln(w_1) = \lambda_1^0 + \varepsilon_1 \quad (2)$$

where $\varepsilon_0 \sim N(0, \sigma_0^2)$ and $\varepsilon_1 \sim N(0, \sigma_1^2)$. In addition, $\lambda_0 = a_0 + b_0 * \bar{S}_0$ and $\lambda_1 = a_1 + b_1 * \bar{S}_0$. ε_0 and ε_1 yield the unobservable individual skills. λ_0 is the average income in the country of origin, and λ_1^0 the average income that will perceive every citizen of sending country if its entire population were to migrate to the host country (λ_0 and λ_1^0 are the observable variables). $\bar{S}_0$ is the average skill of the population at origin. We suppose that a migrant perfectly evaluates his unobservable skills premium and has information on the average income at destination. Based on this assumption, the expected average income can be written as a function of income at origin. Therefore, the income expected is correlated to the average income received with regard to the level of qualification (Mayda, 2010).

Differentiating logarithmic components of equations (1) and (2), we can specify the probability for an individual i to migrate. Then, migration decision depends on the sign of $\ln(w_1) - \ln(w_0)$. A positive gap between the expected income and domestic income implies a profit. Given that expectation, the selection is related to the probability to migrate for an individual i. Moreover, migration costs (c_i) may differ across individuals[5]. Following Borjas (1988) the function of decision (I), for an individual (i) in country (0), can be written as:

$$I = \ln\left(\frac{w_{1i}}{w_{0i}+c}\right) \approx \left[(a_1 - a_0) + (b_1 - b_0)\overline{S}_0 - c_i\right] + (\varepsilon_{1i} - \varepsilon_{0i}) \quad (3)$$

The individual (i) migrate from (0) to (1) if $I > 0$. In equation (4), $v = (\varepsilon_{1i} - \varepsilon_{0i})$ and $z = \frac{\lambda_1^0 - \lambda_0 - c_i}{\sigma_v}$. σ_v is the standard deviation of the function I. $\phi(z)$ is a standard function with normal a distribution. The emigration rate is a negative function of the domestic average income, migration costs, and positive function of average income expected. Therefore, restrictions imposed (in receiving country) may limit the number of admissions.

The probability of emigration (P) based on the average income expected in the host country is:

$$P = Prob\left[v > -\left[(a_1 - a_0) + (b_1 - b_0)\overline{S}_0 - c_i\right]\right] = 1 - \phi(z) \quad (4)$$

Modeling migration decision by this way assumes that determinants are related only to past and current information about origin and destinations. Then, migrants' choices are driven by expectations of wages gap and average earnings between domestic and any given destination country.

However, some migration decisions are temporary. They are done only when the migrant fail to reach the first option. Then, in this case, the choice observed is an

[5] Migration costs are modelled in several ways that include factors as origin and destination skills premium. Mayda (2010) assume that individual unobservable characteristics are correlated in both origin and destination. Moreover, the probability to stay varies across immigrants and matters in the index function (the probability to stay in the country of destination influences the costs for an individual i).

intermediary or a temporary destination. Such an omission leads to biased results because of application of static model to panel data. Using a sequential model for migration can be helpful to overcome this limit. In practice, the migrant faces sequential decisions from one period to another depending on his expected employment status (employed or unemployed). The function of decision is derived from the individual behavior model of McFadden (1973), especially his random utility maximization (RUM) model.

1.2. The random utility maximization model

The sequential model of migration provides a different approach of migrants' decision function. The random utility model of migration describes the utility that an individual located in a country derives from migration toward another location. In the RUM model, the observable attributes are represented by explanatory variables, and the unobserved as random variables (see Domencich & Mc Fadden (1975), Hensher & Johnson (1981), and Ben-Akiva & Lerman (1985) for theoretical foundations of the random utility models).

Let's consider a given set of migrants denoted i, located in country x, with location preferences sets containing n elements, and time period $t = 1, \ldots, T$. The utility from moving to a given country y is:

$$U_{ixyt} = g_{yt} - c_{xt} + \alpha S_{t+1}(y) + \epsilon_{iyt} \quad (5)$$

Explanatory components of the function are: the deterministic term in y at time t denoted g_{yt}, the constant migration costs c_{xy}, the discounted value of the expected utility $S_{t+1}(y)$ from the choice of the most optimal location at $t+1$ in comparison with staying in y at t (with time discount factor $\alpha \leq 1$), and the random term ϵ_{iyt}. $S_{t+1}(y)$ is a random variable, also called continuation payoff (Bertoli, Brücker and Moraga, 2016), depending on individuals location choices y. So, if there is no migration cost $S_{t+1}(y) = S_t$ irrespective to y. The probability to select country y over the probability to stay in country x at time t is:

$$\ln\left(P_{iyt}/P_{ixt}\right) = g_{yt} - c_{xt} - g_{xt} + \alpha[S_{t+1}(y) - S_{t+1}(x)] + \epsilon_{iyt} \quad (6)$$

The discounted continuation payoff of moving from x to y, $\alpha[S_{t+1}(y) - S_{t+1}(x)]$, can be presented as a function of alternative destinations payoff and dynamic multilateral resistance to migration (given that the function of choice probability is sequential)[6]. Let consider M_{xyt} the logarithm of the probability of moving from x to y at time t (P_{iyt}/P_{ixt}). The multilateral resistance is denoted $r_{xyt} = \alpha[S_{t+1}(y) - S_{t+1}(x)]$ and the error term ϵ_{xyt}.

Multilateral resistance arises since the amount of bilateral migration flows in any country could be affected by flows in other destinations throughout the world. So any change in the attractiveness of alternative destinations could modify a bilateral migration flow. Omitting multilateral resistance lead to important bias given that emigrants decision to migrate in one country depends on alternatives destinations. Another bias holds on the temporary dimensions of some decisions. In other terms, some immigrants registered as long term residents are in fact temporary residents. In this paper, we use a common correlate effect (CCE) structure proposed by Pesaran (2006), and extended recently to migration studies by Bertoli & Moraga

[6] Indeed, the future attractiveness of alternative destinations determine the choice of location, and the latter is mostly related to the whole structure rather than bilateral migration costs.

(2013). This technique is consistent when multilateral resistance relies on the heterogeneity in preference for migration (see for instance Ortega & Peri, 2009; Grogger & Hanson, 2011).

$$M_{xyt} = \gamma(g_{yt} - g_{xt}) + r_{xyt} + \epsilon_{xyt} \quad (7)$$

Following the multifactor structure of errors in panels (Pesaran, 2006) the multilateral resistance term $r_{xyt} \approx \tilde{r}_{xy} + \theta_{xy} f_t$ (where $\tilde{r}_{xy}$ is the dyad specific average of covariates over time and f_t a vector of common factors). $\theta_{xy} f_t$ can be presented as a dyad –specific linear combination of the cross-sectional average of the dependent and of the regressors (Bertoli and Moraga, 2013).

Equation (7) can be simply written as a function of dyadic fixed effects, and vector of cross sectional average of the dependent and independent variables $\tilde{h}_t$.

$$M_{xyt} = \gamma(g_{yt} - g_{xt}) + \tilde{r}_{xy} + \theta_{xy} f_t + \epsilon_{xyt} \quad (8)$$

Then, $\tilde{r}_{xy} = \delta_{xy} d_{xy}$, $\theta_{xy} f_t = \eta_{xy} \tilde{h}_t$, and such a model is consistent to CCE estimation (Pesaran, 2006).

Therefore, the migration decision is the following:

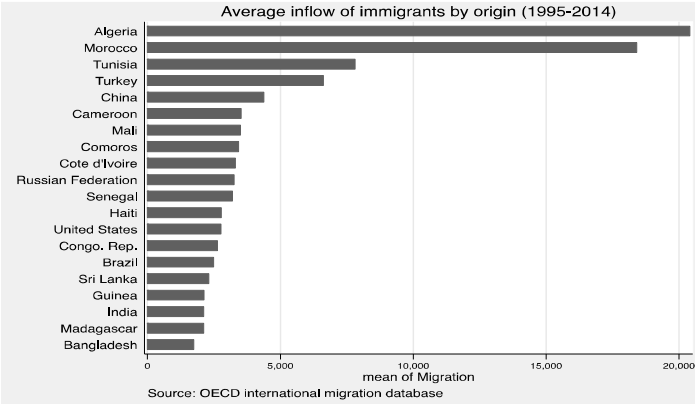
$$M_{xyt} = \gamma_1 g_{yt} + \gamma_2 g_{xt} + \delta_{xy} d_{xy} + \eta_{xy} \tilde{h}_t + \epsilon_{xyt} \quad (9)$$

2. INDICATORS OF FRENCH IMMIGRATION POLICIES

2.1. Brief description of migration patterns in France

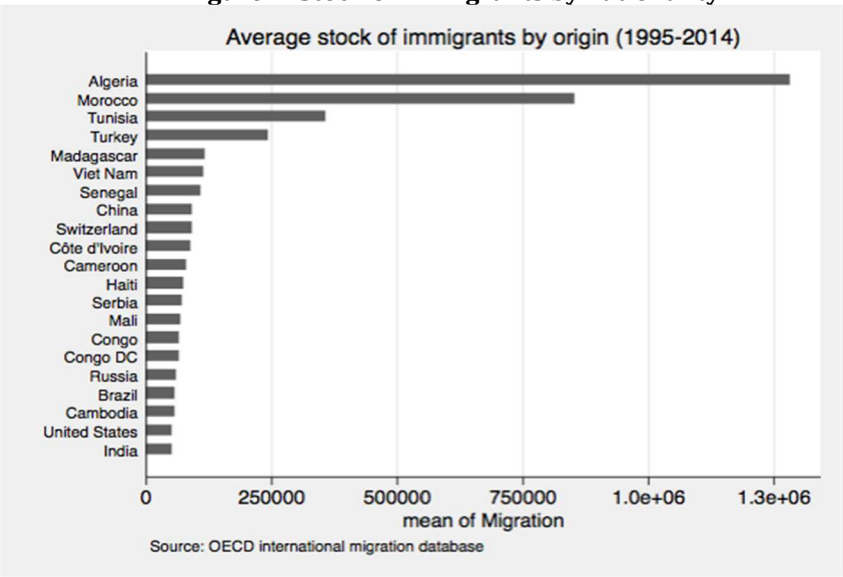
Very little changes have occurred in the structure of the immigrant population since 1995. Most of the top twenty foreign countries of origin share at least a common language or colonial ties with France. Figures 1 and 2 show respectively, on average, the size of immigrants flows (from 1995 to 2014) and stocks (from 1999 to 2014), in France. Algeria, Morocco and Tunisia are in the top 5 partners both in terms of stock and flows of immigrants. Similarly, more than ten countries are in the top 20 for both flows and stocks. A large share of missing data on the stock of immigrants from 1995 to 2000 does not make possible a comparison with flows on the same period. Nevertheless, the average values suggest a positive correlation between flows and stocks of immigrants in France. Hanson & McIntosh (2010) find a strong effect of the cohort (stock) on Mexican immigration in United States.

Figure 1: Annual average inflow of immigrants by nationality



This relationship is also confirmed in several empirical papers[7]. This correlation is probably related to persistent bilateral specific effects with the sending countries on the basis of historical, economic, geographical or linguistic factors.

Figure 2: Stock of immigrants by nationality



2.2. A review of the major migration policy indicators

In the literature, we identify three major indicators developed to assess policies in Europe and OECD countries[8].

The first one, FRDB's indexes, evaluate six dimensions of policies[9] noting the hardening of entry and residence conditions. The level of restrictiveness is noted on a scale from 0 to 6, from the most permissive to the most stringent, for the EU 15 (except Belgium, Luxembourg and Sweden) from 1990 to 2005. This indicator also provides an assessment of asylum policies. The comparison the changes in immigration reforms in these countries is possible using this indicator but the time dimension of FRDB's indexes is unfortunately limited to 2005.

The second indicator, named MIPEX, has been developed by the MPG (Migration Policy Group) and the BCIA (Barcelona Centre for International Affairs). MIPEX (2004) indexes assess integration policies for migrants in 15 countries. After an update, the number of indicators has been extended, and the data now contains 148 indicators for 31 countries. MIPEX evaluates seven pillars of integration: mobility in

[7] For example Docquier et al. (2014) in a cross-country study on the determinants of potential and actual migration; More recently Manchin & Orazbayev (2018) analyze the role of social networks as individual international migration drivers.

[8] The International Migration Law and Policy Analysis (IMPALA) provided an indicator of policies over the period 1990-2008 for only six countries. These pilot countries are Australia, France, Germany, Luxembourg, the Netherlands and the United States. This project especially analyses admission policies and compiles comparable measures of policy stringency across countries. See for instance Beine et al. (2015).

[9] Entry into the territory, the duration of the first residence, conditions of residence, obtaining a permanent residence permit, the number of directors involved in the procedures and quotas.

the labor market, family reunification to members from third countries, education, political participation, permanent residence, access to nationality and fight against discrimination.

The third set of data is related to DEMIG Policy[10]. It is released by the International Migration Institute (IMI). The DEMIG project tracks the changes in migration policies of 45 countries over the period 1945-2013. Quantitative and qualitative indicators include eight characteristics of migration policy: the magnitude, level of legislation, policy area, policy tool, target group, target origin, specific nationalities and restrictiveness.

Different parameters explain the diversity of outcomes when focusing on the effects of immigration policies. Depending on the designated indicator in a model, results of estimation may differ significantly. The methodological procedures adopted are not the same to construct these indicators. In addition, as mentioned above, the time dimension is not the same for all the indicators considered.

2.3. Building the three indexes of French immigration policies

In this paper, we build three indexes of immigration relying on the three dimensions of French immigration policies to: admission into the territory, integration, and asylum policy.

Admission into the territory refers to the conditions required to cross the frontiers legally. A wide range of core criteria, as the number of official documents, the educational attainment, the expected income level, or financial assets could make grow up or down the number of candidates for immigration.

Integration policies shape mainly the conditions of legal residence. They reflect the hardness of procedures that the immigrants face to get the same living rights as nationals.

Asylum policies measure the restrictiveness of criteria or conditions required to get asylum status (victims of war, political and social persecution and discriminations are generally the main criteria used by immigration officers).

These indicators are constructed so as to recognize the changes over the time following the laws, regulations or circulars in force. An indicator increases by one unit if the measures are binding, subtracted by one unit if the policy is relaxed, and finally takes a zero if the policy is unchanged.

Our technique aims to be consistent with the perception of migrants when facing changes in immigration conditions. When the number of criteria to be eligible increases, the index of perception also increases. In order to build our three indicators of immigration, we follow the three sub-steps of Munck & Verkuilen (2002): (i) Conceptualization, (ii) Measurement, and (iii) Aggregations. The indicators describe changes in policies (See Annex 2) implemented in France over the period 1995-2014. Annex 3 gives details on how we build the indexes following the method of Munck & Verkuilen (2002).

Table 1 presents the distribution of our indexes of immigration policy for France, including the aggregate sum and average value over the period (References of laws, decrees and decisions related to the indexes are given in Annex 2). Changes in the indexes have been implemented according to changes in migration policies during the period covered by the study. For example, in 1997, a law called "loi Debré", strengthens the system of expulsion of illegal immigrants, restricts the powers of judges in matters of detention, and reinforces the judicial power of the border police. This suggests an increase of the Integration index by one because the "loi Debré" implies an additional disposition that facilitates the expulsion of immigrants that do

[10] See De Haas et al. (2014) for a large description of DEMIG policy data.

not have a residence permit. The asylum index increases by two units because it should generate a size effect reducing the inflow of asylum seekers. Indeed, a size effect does not target a category but concerns the entire immigrant population.

Table 1 : Indexes of French immigration policies

Year	Admission (1)	Integration (2)	Asylum (3)	Sum (1+2+3)	Average value
1995	0	0	0	0	0
1996	0	0	0	0	0
1997	0	1	2	3	1
1998	0	-2	-1	-3	-1
1999	0	-2	0	-2	-0.67
2000	0	0	0	0	0
2001	0	-2	0	-2	-0.67
2002	0	0	0	0	0
2003	3	5	-1	7	2.33
2004	0	1	0	1	0.33
2005	0	0	0	0	0
2006	4	1	0	5	1.67
2007	1	1	-1	1	0
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	2	0	2	0.67
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	0	0	0	0	0

Notes: The yearly average value is the ratio sum (1+2+3)/3.
https://www.senat.fr/rap/l14-716/l14-71621.html

3. EMPIRICAL MODEL AND DATA

From the traditional to modern approach of selection we notice that the latter is more efficient with regard to the relevance of alternative destinations in immigrants' decisions. The model developed below represents a starting point of our strategy. In equation (9), the propensity ($M_{ijt} = P_{ijt}/P_{it}$) to migrate is approximated, from a country i to country j, by the number of immigrants P_{ijt} from i over its population P_{it}. Emigration is realized if the expected returns exceed the costs it generates. Therefore, the model depends on time and individual explanatory variables gathered in vectors of covariates.

$$\mathrm{M_{ijt}} = \gamma_1 \mathrm{g_{ijt}} + \gamma_2 \mathrm{g_{iit}} + \delta_{\mathrm{ij}} \mathrm{d_{ij}} + \eta_{ij} \tilde{h}_{\mathrm{t}} + \epsilon_{\mathrm{ijt}} \quad (10)$$

3.1. Empirical model

Our empirical model is based on the relationship established above between utility gains and the emigration rate at a country level. For a given country (i) the ratio of emigrant over total population can be expressed as a non-linear function of explanatory variables. The emigration ratio mainly depends on the expected wage at destination (j), presented, and the migration costs induced (Equation 4). Based on the RUM, there is a gain from emigration if utility is positive (Equation 5). The pseudo-gravity model obtained from the RUM model (Equation 9), can be estimated

using the gross bilateral migration flows as dependent variable (Beine, Bertoli and Fernández-Huertas Moraga, 2016, p. 503).

$$\ln(P_{ijt}) = a_0 + a_{1it}\ln(GDPcap_{it}) + a_{2jt}\ln(GDPcap_{jt}) + a_{1ij}\ln(Distance_{ij}) + a_{2ij}Lang_{ij} + a_{3ij}Colony_{ij} + a_{1it}\ln(Pop_{it}) + a_{2it}\ln(Remit_{it}) + a_{3it}\ln(Agedep_{it}) + a_{4it}Unemploy_{it} + a_{5it}Poverty_{it} + a_{1ijt}vwp_{ijt} + a_{2ijt}Export_{ijt} + b_{kjt}Policy_{kjt} + c_{ij}\tilde{S}_t + u_{ij} + \varepsilon_{ijt} \quad (11)$$

where the dependent variable, P_{ijt}, is the annual immigrant inflows from country *i* to country *j*, and Pop_{it} the total population living in the country of origin *i* in year *t*. $GDPcap_{it}$ and $GDPcap_{jt}$ are respectively the gross domestic product per capita of origin (*i)* and destination (*j)* in year *t*. *GDPcap*, a proxy of wages, is expected to be negative for origin and positive for destination. $Distance_{ij}$ is the bilateral distance, in kilometers between the two biggest cities, and weighted by the share of the city on overall population of country (Mayer and Zignago, 2011). From the empirical literature, the distance between two economies have a negative effect on migration (see Head et al., 2010, for the US case study).

The model includes bilateral specific ties in country-pairs. $Lang_{ij}$ and $Colony_{ij}$ are dummy variables capturing respectively the effects of common language, and common colonial relationship. The French case is particularly interesting for such an empirical checking. Indeed, a large share of immigrant's inflows in France come from countries sharing a common language and/or colonial relationship (former colony and colonizer). $Lang_{ij}$ equals 1 if countries i and j share both the same official language, and 0 otherwise, $Colony_{ij}$ equals 1 if i and j share a colonial history, and 0 otherwise. Several studies revealed that immigrants are more likely to be from a country that has a language in common with the country of destination (Clark et al., 2007; Pedersen, Pytlikova, & Smith, 2008; Grogger & Hanson, 2011; Chiswick & Miller, 2015).

Migration policies, $Policy_{kjt}$, quantify the restrictiveness of regulation and law implemented to control migration flows. The indice *k* identify the 3 indexes (Policy1=admission, Policy2=integration, Policy3=asylum), considered in the estimation as detailed in the previous section. We use Policy4=restriction and Policy5= change_lev from DEMIG project for robustness checks.

Moreover, some variables of control help to confirm the good specification of the model estimated. The age dependency ratio, $Agedep_{it}$, indicates the burden of inactive people. Living in a country with a large part of inactive people in the population discourage immigration because of high dependency on workers. The latter support a big burden that reduces their financial capacity. As a consequence, a growing proportion of this variable reduces immigration of young people. We also consider the flows of remittances ($Remit_{it}$) received by country of origin as a percentage of the gross domestic product. On the expected signs, remittances should motivate more emigration in sending countries. The value of remittances inflows reveals how much emigration in a given location matters. So, this variable should have a positive effect on migration inflows.

Finally, equation (11) takes into account the existence of visa waiver program (vwp_{ijt}), the risk of poverty ($Poverty_{it}$), the bilateral export flows ($Export_{ijt}$), and unemployment ($Unemploy_{it}$) at origin. The implementation of agreements on *vwp* aims to ease international mobility for citizens. The French visa waiver program counts forty-eight countries including all the European Union (EU) members and other foreign partners. A growing poverty, which is a major push factor, stimulate economic immigration flows. In our data, we consider the poverty risk index that

estimates the risk of poverty for a given country. Low values of the index correspond to high risks of poverty. So, we expect a negative sign for this variable. Export flows denotes the importance of a country-pair economic size, generally positively, correlated with immigration flows. Unemployment, indicates the percentage of the jobless active population looking for an employment. One of the major push factors is the higher unemployment rate of young people. Higher unemployment rate is expected to encourage emigration. $\tilde{S}_t$ is the vector of cross-sectional average of the dependent and independent variables, u_{ij} the country-pair fixed effect, and the error term is ε_{ijt}.

3.2. Data

Data description and sources

Immigrants flows come from the OECD international migration database[11] (OECD, 2015). Annual immigration, measured by the number of permanent inflows, reports movements of foreigners considered to be settling in the country from the perspective of the destination country. Inflows cover the regulated movements of foreigners as well as free movement migration[12].

Considering the three dependent variables, the inflow of foreign population by nationality contains the largest flow of immigrants. Among the flows of foreign people, the available data allows us to differentiate the flows of foreign worker, and flows of asylum seekers.

Unfortunately, the remaining disaggregated sub-flows of foreign population inflows is not available. However, the sum of sub-flows over time show that, even though immigrant inflows increase, there are significant changes in their components, in particular, for permanent immigrants (see Figure 3). The main drivers of permanent immigration flows are family and free movement, reaching top values of 108,454 in 2006 and 95,863 in 2013. Humanitarian, work, and other flows are very low in comparisons with family and free movement.

In Figure 4, the evolution of foreign population inflows is driven by asylum demand and workers. So, we consider these two types of inflows as dependent variables in the following section.

From the explanatory variables side, *GDP per capita, population, export, distance, language, colony* data come from the CEPII "square" gravity dataset originally generated by Head et al. (2010). They compute GDPs and populations variables from the World Development Indicators (WDI). Unemployment and age dependency ratio data come from the WDI. *Population* is based on the de facto definition, which counts all residents regardless of the legal status or citizenship. *Poverty* come from the International Country Risk (ICRG) data base[13]. The risk of poverty is an annual measure of the level of poverty on the basis of credible sources (IMF, World Bank, CIA Factbook). A score of 4 points means a very low risk, and a score of 0 point to a very high risk. *Age dependency* is the ratio of dependents (people under 15 or older than 64) to the working-age population (those aged 15-64) in percentage.

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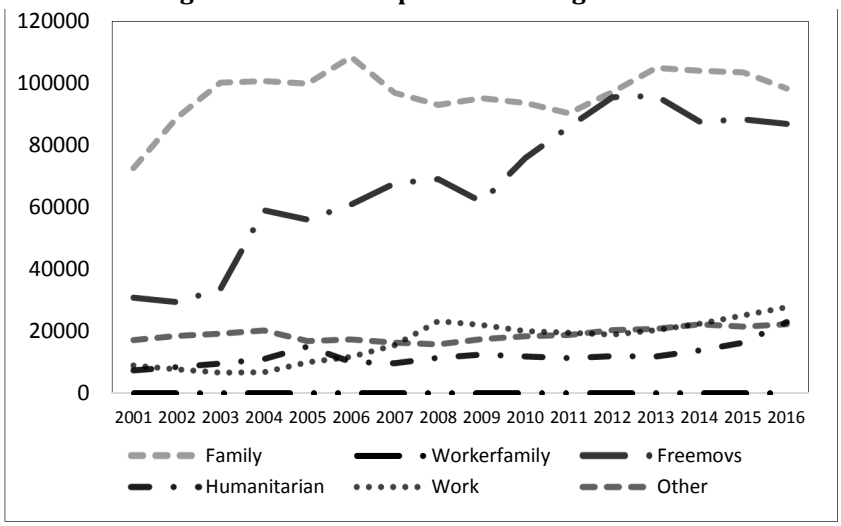
[11] In 2004, data come from the French Office for Immigration and Integration. From 2005 onward, they are based on the first permanent-type permits delivered. This includes status changes from a temporary-type permit to a permanent-type permit. Data are available at : https://stats.oecd.org/Index.aspx?DataSetCode=MIG

[12] The foreign population consists of people who still have the nationality of their home country and measured as a percentage of population.

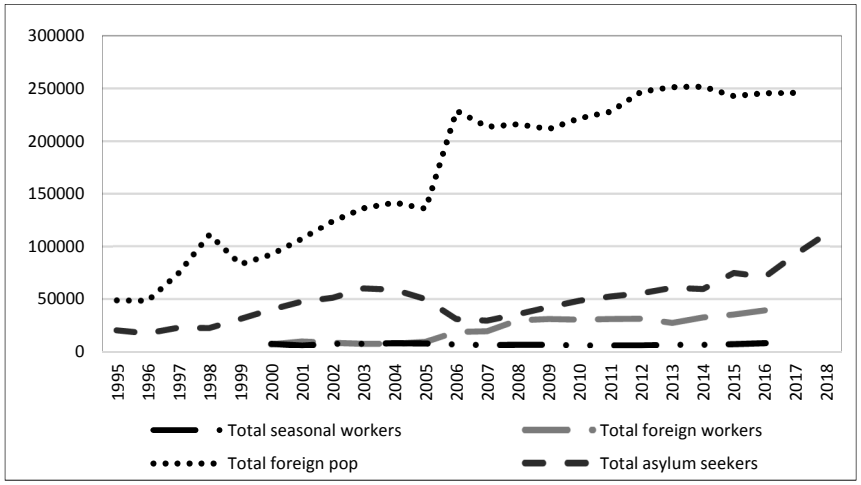
[13] In the data, we use the risk of poverty instead of poverty headcount ratio proposed by the World Bank. The high number of missing values contained in the latter does not allow to get sufficient observations for consistent results.

Figure 3: Inflows of permanent migrants



Source: OECD (2018) Permanent immigrants inflows.

Figure 4: Inflows of foreign population



Source: OECD (2020) Permanent immigrants inflows.

Migration policies indexes are computed from our own calculations on the basis of publics resources on laws and decrees[14] for "*admission*", "*integration*" and "*asylum*" (see section 1). Our indexes tend to shape three aspects of immigration regulation: admission, integration and asylum. Migration process takes into account policies because of their impact on the choice of destination[15]. The two first indexes ("admission"

[14] See for instance http://www.vie-publique.fr/politiques-publiques/politique-immigration/chronologie-immigration/

[15] Regarding, permanent immigration, in particular workers, individual will be influenced by integration laws as well as admission. They will face a tradeoff between admission requirement and the conditions of integration in France, in comparison with other developed countries.

and "integration") should affect the total inflow of foreign population and the inflow of foreign workers. "Asylum" index should impact the flows of asylum seekers.

For the robustness of our results, we use two indicators of the International Migration Institute (IMI)[16]. The first, named "*restriction*", assesses whether the policy measure represents a change towards more or less restrictiveness of the existing legal framework. The second, named "*change_lev*", assesses the magnitude of the policy.

The Visa waiver program[17] (VWP) cover 34 of 141 countries in the sample. The VWP data are computed by authors on the basis of French ministry information[18].

Table 2: Summary statistics of the model

Variable	Obs	Mean	Std. Dev.	Min	Max	CV
Dependent Variables						
Foreign population	2961	858.42	2645.55	0	31113	3.08
Foreign workers	2219	147.05	419.37	0	4608	2.85
Asylum seekers	2342	342.34	785.98	0	7192	2.29
Explanatory variables						
GDPcap_i	2858	7.68	1.46	4.17	11.46	0.19
GDPcap_j	2940	10.39	0.24	10.01	10.72	0.02
Distance	2940	8.66	0.57	6.16	9.846	0.06
Population	2938	2.05	1.91	-3.14	7.22	0.92
Language	2940	0.2	0.40	0	1	2.00
Colony	2940	0.21	0.41	0	1	1.91
Visa Waiver Program	2961	0.24	0.42	0	1	1.77
Remittances	2472	19.32	2.37	8.70	24.97	0.12
Age dependency	2894	67.50	20.07	15.74	114.5	0.29
Poverty	2060	0.88	1.17	0	4	1.33
Export	2242	17.77	3.17	2.94	24.24	0.16
Immigration policies						
Admission	2820	0.4	1.06	0	4	2.66
Integration	2820	0.25	1.47	-2	5	5.91
Asylum	2820	0	0.63	-2	2	
Restriction	2679	-0.63	3.40	-9	9	-5.39
Change_lev	2679	14.73	13.05	0	47	0.88

Descriptive statistics

The distribution of migration flows reveals large ranges (see Table 2), moderated when adopting natural logarithm function. Our data on immigration cover the period 1995-2014 with missing observations. Such characteristics of data indicate that variations depend on several factors like development status, geographical distance, or historical links. Coefficients of variation (CV) confirm the heterogeneity, characteristics of immigration flows and policies, in the sample.

[16] DEMIG data record over 200 policy changes since 1850 for France. A methodological paper by Haas et al. (2014) presents a further details on compilation and coding of DEMIG policy data.
[17] The European Travel Information and Authorization System (ETIAS) will be required in 2021 for all visitors traveling to any of the Schengen member country.
[18] The details are presented in Annex 3. https://www.immigration.interieur.gouv.fr/Immigration/Les-visas/Les-dispenses-de-visa

Regarding migration policies, *admission* (Policy_{1jt}) and *integration* (Policy_{2jt}) indicate positive average values suggesting more restrictive laws and regulation over the period. *Asylum* (Policy_{3jt}) policy equals zero on average. Then changes in this index are negligible.

The DEMIG policy indexes are on average negative for *restriction* (Policy_{4jt}) and positive for *change_lev* (Policy_{5jt}). Restriction captures the change induced by a new policy in comparison with the initial situation. An average value of -0.63 shows a slight decrease in the restrictiveness of the policies. Change in level is a benchmark to determine the degree of change induced by a policy. It is positive and presents an average value of 14.73 associated with a very low variation.

4. RESULT OF ESTIMATIONS

4.1. Effects of policies on immigration inflows

Multilateral resistance to migration and endogeneity are two core issues inherent to gravity models applied to migration. The multilateral resistance terms are spatially correlated to alternative destinations even in the case of migration flows from different countries of origin to single destination (Bertoli and Moraga, 2013). In this case, an estimator based on instrumental procedure seems inconsistent because the endogeneity concerns all the determinants of the scale of migration flows[19]. As discussed previously, given the structure of the model, the CCE estimator should be consistent. Given that we consider only one country of destination (France), the bilateral fixed effect is not different from the origin fixed effect.

Table 3 presents the results of the panel data estimated using the CCE estimator. The number of observations ranges between 1642 and 2453 depending on the variable. Admission policies have a positive and significant effect (at 1% threshold) on immigrants' inflows over the period with a coefficient that varies from 0.040 and 0.070. Thus, the total inflows of foreign population increases by 4% to 7% when Admission increases by one unit. This means that as admission policies become more restrictive (increase in the index), migration also increases. This may be an indication that this policy is inefficient. We will get back to this issue later on. This result remains robust in the presence of the indicator of integration and additional variables of control (column 1-7). Integration has a negative and significant effect at 1% on foreign population inflows. The coefficients of integration are robust and varies from -0.048 to -0.020. One percent increase of the index of Integration reduces foreign population inflows by 2.02% to 4.8%. This means that as integration policies become more restrictive, migration is reduced (efficient policy). This difference of results between admission and integration may be due to the fact that most changes in migration policies initiated over the period considered focus on residents and thus may have more affected integration than admission (non-residents).

In addition, we find that the free visa program (vwp) has a negative and significant effect on immigrants' inflows. This result suggests that immigrants are more likely to come from countries that are not committed in a free visa program with France.

The time invariant variables are excluded from the current estimation because of potential collinearity with countries specific effects. The remaining variables present the expected signs with regard to the specifications. However, the Pesaran (2015) cross-sectional test for weak dependence fails to reject the null hypothesis of residuals independence. As suggested by Hoechle (2007), we run a pooled ordinary least

[19] According to Bertoli and Moraga (2013), the determinants of migration scale can be common economic shocks, policies, or partial business cycles. Assuming such a correlation implies that origin determinants are also correlated to multilateral resistance term.

squares (OLS) using the Driscroll & Kraay (1998) robust standard errors (Table 4). This estimator is consistent when the condition of cross-sectional independence is not filled.

Table 3: The effect of policies on foreign population inflows using CCE

	Dependent variable : Total inflow of foreign population (in log)						
	1	2	3	4	5	6	7
Policy1							
Admission	0.05***	0.059***	0.04***	0.05***	0.05***	0.06***	0.07***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Policy2							
Integration	-0.03***	0.04***	-0.02**	-0.04***	-0.04***	-0.04***	-0.04***
	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GDPcap_i	0.24***	0.29***	0.18***	0.23***	0.23***	0.19***	0.349***
	(0.04)	(0.05)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)
GDPcap_j	0.67***	0.38**	-0.02	0.42**	0.42**	0.60**	0.84***
	(0.14)	(0.19)	(0.18)	(0.18)	(0.18)	(0.24)	(0.24)
Population	0.23	0.36*	0.43***	0.62***	0.62***	-0.35*	0.64***
	(0.14)	(0.19)	(0.14)	(0.19)	(0.19)	(0.20)	(0.21)
Remittances		0.07***		0.06***	0.06***	0.08***	0.034**
		(0.01)		(0.01)	(0.01)	(0.01)	(0.01)
Age Dependency			-0.59***				
			(0.15)				
Unemployment				0.01***	0.01***	0.01**	
				(0.00)	(0.00)	(0.00)	
Visa Waive Prog.					-3.80***	-3.7***	-1.34***
					(0.71)	(0.71)	(0.33)
Export						0.02**	
						(0.01)	
Poverty							-0.12***
							(0.02)
Constant	-13.74***	-16.05***	63.24***	-14.88***	-11.74***	-7.62***	-12.51***
	(1.21)	(1.50)	(12.61)	(2.275)	(2.18)	(2.94)	(1.86)
Observations	2,453	2,142	2,396	2,081	2,081	2,081	1,642
R-squared	0.94	0.955	0.95	0.95	0.95	0.95	0.95
F	284.8	304.4	300.3	304.5	304.5	302.9	324.4
Pesaran CD	18.09	12.867	9.79	13.72	13.72	13.65	17.56
CD p-value	0	0	0	0	0	0	0
Origin_FE	YES	YES	YES	YES	YES	YES	YES

Notes : Result of estimations using the common correlate error (CCE) estimator. All the columns include country of origin specific effects (Origin_FE). Pesaran (2015) CD is the statistic of Pesaran's weak cross-sectional dependence test (H0: Residuals are cross-sectionally independent). GDP per capita, distance, population, remittances, age dependency, and exports are in logarithms. Given the correlation between time invariant variables and Origin_FE, the common language, colonial ties and distance have been dropped. Standard errors are in parentheses, and *** p<0.01, ** p<0.05, * p<0.1 represent the significance level.

Results regarding migration policies are similar. The majority of remaining variables present the expected signs with regard to the specifications. As expected, the distance has a negative effect on migration flows, and its elasticity decreases depending on the covariates in the regression, down to - 1.103 in Table 4, column 1. Results, from columns 2 to 8, show that common language has a positive effect on immigration. Then, individuals from French official language countries have a higher propensity to migrate than others. Similarly, the effect of colonial ties on the flows is positive and significant. Immigrants are more likely to come from countries that share a colonial tie with France, than those who do not. It also appears that a 1% increase of export flows generates 0.12% increase of migration flows towards France. Millogo & Trojette (2020) find that immigration has a positive and significant effect on trade between their countries of origin and France. From columns 6

to 8 estimates indicate that the effect of the visa waiver program is negative for the inflows. The coefficient reach value of -0.320 and significant at 1%. Then, people coming from countries committed to a visa waiver or free visa program with France have -32% less chance to migrate to France than others in the sample.

Table 4: The effect of policies on foreign population inflows using Driscoll & Kraay SE

	Dependent variable : Total inflow of foreign population							
	1	2	3	4	5	6	7	8
Policy1								
admission	0.05***	0.06***	0.07***	0.06***	0.07***	0.07***	0.07***	0.09***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Policy2								
integration	-0.08***	-0.05***	-0.05***	-0.05***	-0.06***	-0.06***	-0.05***	-0.05**
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
GDPcap_i	0.042*	0.21***	0.22***	0.10**	0.20***	0.22***	0.10***	0.35***
	(0.02)	(0.01)	(0.02)	(0.04)	(0.02)	(0.01)	(0.02)	(0.07)
GDPcap_j	0.86***	0.51***	0.045	0.55***	0.246***	0.19***	0.25***	0.14
	(0.13)	(0.06)	(0.07)	(0.07)	(0.08)	(0.07)	(0.05)	(0.10)
Distance	-1.10***	-0.74***	-0.73***	-0.72***	-0.65***	-0.64***	-0.56***	-0.62***
	(0.09)	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.02)	(0.05)
Population	0.56***	0.59***	0.46***	0.61***	0.48***	0.48***	0.32***	0.50***
	(0.03)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)
Language		1.10***	1.44***	0.93***	1.20***	1.21***	1.34***	1.42***
		(0.03)	(0.13)	(0.06)	(0.14)	(0.14)	(0.08)	(0.08)
Colony		1.64***	1.41***	1.87***	1.62***	1.60***	1.23***	1.31***
		(0.06)	(0.03)	(0.05)	(0.05)	(0.04)	(0.05)	(0.12)
Remittances			0.17***		0.16***	0.16***	0.20***	0.18***
			(0.0170)		(0.01)	(0.01)	(0.01)	(0.02)
Age Depend.				-0.73**				
				(0.28)				
Unemploym.					0.02***	0.02***	0.02***	0.02***
					(0.00)	(0.00)	(0.00)	(0.00)
Visa Waiv. P.						-0.13**	-0.18***	-0.32***
						(0.05)	(0.04)	(0.09)
Export							0.12***	
							(0.00)	
Poverty								-0.16*
								(0.08)
Constant	3.96**	2.53***	4.18***	5.73***	1.47**	1.74***	-1.20**	0.78
	(1.90)	(0.75)	(0.69)	(1.83)	(0.72)	(0.65)	(0.58)	(0.72)
Observations	2,453	2,452	2,141	2,395	2,080	2,080	1,764	1,641
R-squared	0.32	0.55	0.60	0.57	0.59	0.59	0.623	0.59
Number of id	140	139	130	136	126	126	118	96
lag	8	8	8	8	8	8	8	8

Notes : Pooled OLS estimates obtained using the Driscoll & Kraay (DK) standard errors. The lag refers to the maximum lag to be considered in the error structure. GDP per capita, distance, population, remittances, age dependency, and exports are in logarithms. Standard errors are in parentheses, and *** p<0.01, ** p<0.05, * p<0.1 represent the significance level.

The results of estimations show that the socio-economic factors like the dependency ratio and poverty have negative effects whereas remittances and unemployment have positive effects on flows. In other words, the greater is the dependency in a country, the less is the propensity for an individual in this country to migrate to France; in addition, as the risk of poverty increases (lower index), the probability to migrate also increases. On the other hand, a high unemployment rate leads young people to migrate in countries where they expect to get a good job with higher salaries. In the same vein, remittances matter in reducing migration costs for migrants and seem to higher the intention of people to migrate (Manchin and Orazbayev, 2018). Although including additional variables reduce the number of observations because of missing data, our results remain reliable.

Overall, these results confirm the more general finding[20] of a decreasing restrictiveness in entry policies during the two last centuries in developed countries. In the French case, the positive effect of admission indicates that the implementation of new regulations over time did not reduce the flows. Thus, there is a gap between declared targets of policies and their real impact on immigration. However, even if there are no negative effects on the size of immigration, there may be a composition effect. Table 5 illustrates this composition effect through the particular focus on workers.

Table 5: Effect of policies on foreign workers

	Dependent variable : Inflows of foreign workers							
	1	2	3	4	5	6	7	8
Policy1								
Admission	0.06*	0.0945***	0.09***	0.09***	0.102***	0.10***	0.11***	0.10***
	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Policy2								
Integration	-0.11***	-0.12***	-0.12***	-0.12***	-0.12***	-0.12***	-0.13***	-0.13***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
GDPcap_i	0.31***	0.48***	0.51***	0.37***	0.49***	0.48***	0.36***	0.53***
	(0.04)	(0.03)	(0.016)	(0.01)	(0.00)	(0.02)	(0.03)	(0.04)
GDPcap_j	0.928***	1.374***	0.96***	1.45***	1.05***	1.07***	1.21***	1.12***
	(0.19)	(0.22)	(0.13)	(0.22)	(0.11)	(0.12)	(0.13)	(0.15)
Distance	-0.82***	-0.39***	-0.33***	-0.34***	-0.24***	-0.25***	-0.18***	-0.39***
	(0.02)	(0.01)	(0.02)	(0.01)	(0.03)	(0.02)	(0.04)	(0.08)
Population	0.52***	0.59***	0.45***	0.588***	0.45***	0.45***	0.35***	0.56***
	(0.03)	(0.012)	(0.01)	(0.01)	(0.02)	(0.02)	(0.03)	(0.01)
Language		1.01***	1.56***	1.08***	1.66***	1.65***	1.66***	2.14***
		(0.04)	(0.21)	(0.05)	(0.26)	(0.25)	(0.28)	(0.25)
Colony		1.67***	1.33***	1.70***	1.27***	1.28***	1.12***	0.87***
		(0.05)	(0.08)	(0.03)	(0.12)	(0.11)	(0.15)	(0.11)
Remittances			0.174***		0.17***	0.17***	0.19***	0.18***
			(0.04)		(0.04)	(0.03)	(0.04)	(0.03)
Age depend.				-0.73***				
				(0.18)				
Unemploy.					0.01***	0.01***	0.02***	0.03***
					(0.00)	(0.00)	(0.00)	(0.004)
Visa Wai. P.						0.04	0.01	0.17
						(0.09)	(0.09)	(0.18)
Export							0.09***	
							(0.01)	
Poverty								-0.11***
								(0.03)
Constant	-3.01	-13.51***	-12.97***	-10.92***	-14.79***	-14.87***	-17.63***	-15.06***
	(1.83)	(2.19)	(1.89)	(3.00)	(1.64)	(1.74)	(2.19)	(1.53)
Obs.	1,739	1,738	1,554	1,705	1,534	1,534	1,334	1,226
R-squared	0.32	0.59	0.65	0.60	0.65	0.65	0.66	0.68
Numb. of id	139	138	127	135	123	123	117	96
Lag	8	8	8	8	8	8	8	8

Notes : Pooled OLS estimates obtained using the Driscoll & Kraay (DK) standard errors. The lag refers to the maximum lag to be considered in the error structure. GDP per capita, distance, population, remittances, age dependency, and exports are in logarithms Standard errors are in parentheses, and *** p<0.01, ** p<0.05, * p<0.1 represent the significance level.

The coefficient of admission is positive and significant at 1% and varies between 0.0673 and 0.112. Again, an increase of the restrictiveness of admission policies does not reduce the flow of foreign workers.

[20] See the paper by Haas et al. (2016) available online at https://onlinelibrary.wiley.com/doi/full/10.1111/imre.12288

This result is not surprising given that a selective policy has been implemented from 2006 (Sarkozy's immigration and integration law) to attract high skill immigrants[21]. On Figure 4, work immigration starts a remarkable grow in 2005. At the same time, immigration related to free movement have also grown up (see Figure 3) since ten additional members have joined the European Union in 2004.

Table 6: Effect of policies on asylum inflows

	Dependent variable : Inflows of asylum seekers							
	1	2	3	4	5	6	7	8
Policy3								
Asylum	-0.13	-0.135*	-0.13*	-0.08	-0.09	-0.13	-0.14*	-0.10
	(0.08)	(0.08)	(0.08)	(0.08)	(0.06)	(0.08)	(0.08)	(0.08)
GDPcap_i	-0.28**	-0.26**	-0.26**	-0.26	-0.48**	-0.26**	-0.32	-0.31**
	(0.12)	(0.12)	(0.11)	(0.17)	(0.21)	(0.12)	(0.23)	(0.14)
GDPcap_j	1.56***	1.51***	1.51***	1.41***	1.86***	1.53***	1.57***	1.63**
	(0.34)	(0.34)	(0.33)	(0.39)	(0.52)	(0.33)	(0.33)	(0.64)
Distance	-1.28***	-1.25***	-1.26***	-1.25***	-1.17***	-1.28***	-1.22***	-1.42***
	(0.11)	(0.11)	(0.11)	(0.14)	(0.06)	(0.11)	(0.13)	(0.20)
Population	0.32***	0.34***	0.35***	0.29***	0.29***	0.32***	0.35***	0.25***
	(0.04)	(0.05)	(0.05)	(0.04)	(0.02)	(0.04)	(0.04)	(0.06)
Language		0.27***						
		(0.06)						
Colony			0.40***					
			(0.15)					
Remittances				0.03				
				(0.03)				
Age depend.					-1.14*			
					(0.58)			
Visa Wai. P.						-0.16		
						(0.10)		
Poverty							-0.00	
							(0.24)	
Export								0.05***
								(0.01)
Constant	0.32	0.26	0.26	0.87	2.58	0.46	-0.17	0.05
	(2.51)	(2.48)	(2.49)	(2.34)	(3.02)	(2.48)	(1.7)	(5.53)
Observations	1,532	1,532	1,532	1,323	1,526	1,532	1,131	1,153
R-squared	0.18	0.18	0.19	0.17	0.19	0.18	0.16	0.22
Number of id	107	107	107	101	106	107	81	100
Lag	8	8	8	8	8	8	8	8

Notes : Pooled OLS estimates obtained using the Driscoll & Kraay (DK) standard errors. The lag refers to the maximum lag to be considered in the error structure. GDP per capita, distance, population, remittances, age dependency, and exports are in logarithms. Standard errors are in parentheses, and *** p<0.01, ** p<0.05, * p<0.1 represent the significance level.

The effect of integration policies is negative and significant at 1% in all the columns, and it ranges from -0.134 to -0.111. It means that regulations and laws related to integration negatively affect the foreign worker inflows. Workers seem to self-select following a random utility function as developed in the second section. The major changes are immigration laws in 2003 and 2011 imposing respectively tight conditions for family reunification and regularization of illegal immigrants.

Distance, as expected, presents a negative elasticity. GDP per capita is positive and significant for both origin and destination, with a higher elasticity for destination. Hence, 1% increase in GDP per capita at origin generates an increase of work immigration about 0.539%, and 1% increase in GDP per capita at destination generates

[21] Nicolas Sarkozy presented to the French parliament a draft law relating to immigration control and the stay of foreigners in France in 2003.

1.451% increase of foreign workers inflows. Population size at origin, as well as common language and colonial ties, have positive effects on flows. In addition, the variables of control like unemployment, dependency, and remittances matter. In the same vein of previous results, unemployment and the volume of remittances received stimulate work immigration. Conversely, an increase of the age dependency ratio and poverty index reduce the foreign inflows. Then, confirming the results above, lower values of the index of poverty (increase in poverty) are still associated with higher migration flows. The implementation of visa waiver program is not significant in explaining work immigration. This result may be due to the fact that foreign workers tend to be skilled workers. Visa requirement is no more a huge barrier for this category of migrant. Thereby, foreign worker inflows mainly depend on the relative wealth of the country of origin, admission and integration policies, language skills and other economic condition, and less on free visa program.

Let turn now on the effects of asylum policy on flows (Table 6). Recent famous policies targeted asylum seekers in France.[22] One of the particular characteristic of asylum or humanitarian immigrants is that they are not primarily motivated by economic welfare. Indeed, asylum seekers are generally looking for protection, and favorable environment for social integration. We address the determinants of asylum inflows by estimating equation (11) where the dependent variable is the inflows of asylum seekers. Table 6 reports the estimates of the model. It appears that asylum policies are not enough significant to explain the variation in asylum inflows. There are no remarkable changes in the results when we introduce additional variables of control as common language, colonial ties, poverty (see columns 2, 3 and 7).

The coefficients of the indexes of policy estimated in this paper can be compared in order to shape a total effect on the flows by category of immigrants defined as dependent variable. This effect is obtained by adding the coefficients of the policy indexes. When we consider the total inflows of foreign population, we find a global positive effect (Table 4) of admission and integration policies on flows. This suggest that overall, tighter integration policies fail to reduce migration flows in France. Conversely, the global effect of policies is negative (Table 5) for the total inflows of foreign workers. However, the effects of migration policies on asylum inflows is not significant (Table 6).

Regulation allows to shape the profile of demanders and define some criteria to reach the expected results. However, despite changes in the legislation in France, the number of asylum seekers is still increasing. This growing trend (see Figure 4) is caused by exogenous factors as wars or political percussion. As a result, policies cannot stop asylum demand, but only manage the flows at the frontier (or after admission) and the issue of decisions. In order to align the EU States asylum legislation, the harmonization of European policies led to a Common European Asylum System (CEAS) in 2008.

From the results obtained above, the management of immigration through policies has some expected and unexpected effects. Estimating the effects of policies is a great challenge even if we enumerate and identify them at a disaggregated level. Finally, it seems obvious that composition effects of policies matter, and the analysis focusing only on size effects is biased.

4.2. Robustness checks

In order to corroborate our findings, in the current sub-section, we use the DEMIG data for France to shape the restrictiveness of policies and changes in the level resulting from regulation. To date, DEMIG project provides the most complete

[22] The European Pact for Immigration and Asylum has provided for the harmonization of immigration and asylum policies within the European Union in 2008, and immigration, integration and nationality law in 2011.

data on migration policies for a large sample of countries. The index of restrictiveness should follow the same tendency like admission policies as it also refers in part to entry into the territory[23]. The variations in the magnitude of restrictions expected are not comparable with the previous indexes but the sum of restrictions and their magnitude provides an overall effect of policies.

DEMIG indexes take into account both bilateral, multilateral, and national levels of legislation, where our admission, integration and asylum indexes just consider national and multilateral levels. For example, the value of DEMIG index of restriction for a given year does not only include the changes in policies that concern all the partners. It also includes changes addressing bilateral partners. As a result, the global annual average value of the index does not reflect the average level of restriction for each country of origin. This is a limit when using DEMIG indexes in estimations.

Table 7 reports the results of the regressions, based on pooled OLS using Driscoll and Kraay standard errors, following the overall foreign population, foreign workers, and asylum seekers inflows. The model estimated excludes export flows, poverty, free visa program and common language to focus on policies.

The three first columns (1, 2 and 3) show that the index of restriction has a negative and significant effect (reaching a maximum value of -0.049) on the total inflows of immigrants whereas the effects of change in the level are not significant. Although these effects of restriction are low, they suggest a negative relation between changes in the restrictions and migration flows. The negative average value of the restriction index (Summary statistics presented in Table 2) can, in part, explains the negative sign of the coefficient. This result is statistically consistent with the growing trend of migration flows over the same period but is the opposite of results of section 4.1 for admission. The explanation of the differences between our index of admission and DEMIG restriction is the larger components of restriction index described above in the previous lines of the subsection. Indeed, we note stringent French migration policies over the same period when considering only the entry restrictions. Despite a global decrease in their stringency, migration policies remain more restrictive for low skilled and less restrictive for high skilled individuals. This result is found in a recent papers by Flahaux (2017) and De Haas et al. (2019).

We also highlight that the magnitude of changes in restriction (change_lev) does not determine significantly the foreign population inflows. GDPs per capita is positive, distance is negative, and both are significant à 1%. Remittances and dependency are respectively positive and negative at 1% as expected. These results confirm those obtained above despite the differences in the indexes of restrictiveness estimated.

In columns 4 to 6, the estimates indicate a negative and significant effect of restriction on work immigration. The result is not surprising because the reforms implemented in 2003 and 2007 aimed to raise the share of skill workers, and limit the proportion of family immigration. So, given the decreasing restrictiveness in policies, the changes in this indicator are associated with a higher worker flows. Changes in the magnitude of policies (change_lev) do not affect significantly the evolution of this type of immigration. The measures of restrictions were broadly in the same tendency addressing total inflows and foreign workers.

The last columns (7, 8, and 9) concern the flows of asylum seekers. Restriction indicator is positive and significant at 5%, suggesting that a more restrictive policy is associated with more asylum seekers inflows. Moreover, the magnitude of restrictions (changes in the level of policies) is negative (-0.010 in column 8).

[23] DEMIG indexes evaluate 4 policy areas (Legal entry and stay, Integration, border and land control, and exit). Admission should correspond in part to some policies accounted in the DEMIG legal entry and stay policy area.

Table 7: Robustness using DEMIG indexes

	Total inflows of foreign population			Inflows of foreign workers				Inflows of asylum seekers	
	1	2	3	4	5	6	7	8	9
Policy4									
Restriction	-0.01***	-0.01***	-0.01**	-0.03***	-0.03***	-0.03***	0.0491**	0.04**	0.04**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.0241)	(0.02)	(0.02)
Policy5									
Change_lev	0.00	0.00	0.00	0.00	0.00	0.00	-0.0095***	-0.01***	-0.00***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.0027)	(0.00)	(0.00)
GDPcap_i	0.04*	0.10***	0.10***	0.29***	0.37***	0.36***	-0.294**	-0.50**	-0.25
	(0.02)	(0.05)	(0.01)	(0.04)	(0.04)	(0.03)	(0.127)	(0.22)	(0.17)
GDPcap_j	0.38**	0.40**	0.005	1.24***	1.25***	0.91***	2.044***	2.05***	1.80***
	(0.18)	(0.12)	(0.11)	(0.29)	(0.28)	(0.21)	(0.428)	(0.39)	(0.43)
Distance	-1.13***	-1.13***	-1.19***	-0.75***	-0.78***	-0.79***	-1.297***	1.22***	-1.29***
	(0.07)	(0.07)	(0.08)	(0.01)	(0.02)	(0.03)	(0.0918)	(0.05)	(0.11)
Population	0.55***	0.61***	0.48***	0.534***	0.54***	0.47***	0.328***	0.29***	0.30***
	(0.03)	(0.05)	(0.03)	(0.02)	(0.02)	(0.00)	(0.0465)	(0.02)	(0.03)
Age dependency		-0.50**			-0.46***			-1.27*	
		(0.27)			(0.05)			(0.67)	
Remittances			0.08***			0.05*			0.015
			(0.01)			(0.02)			(0.034)
Constant	9.19***	5.97***	11.69***	-6.74**	-9.25***	-4.41*	-4.431	1.80	-2.50
	(1.37)	(1.45)	(0.88)	(2.62)	(2.37)	(2.25)	(3.707)	(3.79)	(3.12)
Observations	2,321	2,267	2,034	1,641	1,610	1,471	1,456	1,450	1,261
R-squared	0.32	0.38	0.36	0.32	0.32	0.35	0.20	0.21	0.18
Number of id	139	136	130	138	135	127	106	105	100
Lag	8	8	8	8	8	8	8	8	8

Notes: Pooled OLS estimates obtained using the Driscoll & Kraay (DK) standard errors. The results presented are related to the total inflows of foreign population from in column 1 to 3, foreign workers from column 4 to 6, and asylum seekers inflows from column 7 to 9. The lag refers to the maximum lag to be considered in the error structure. GDP per capita, distance, population, remittances, age dependency, and exports are in logarithms. Standard errors are in parentheses, and *** p<0.01, ** p<0.05, * p<0.1 represent the significance level.

This result means that legislation reforms, in magnitude of changes are associated with a reduction of asylum flows. Considering the coefficients of the two dimensions of policies, the effect of restrictiveness seems stronger than those of magnitude. Then, the overall effect of policies is positive for asylum flows. This result is consistent with an hypothesis of a possible disconnection between asylum inflows and policies restrictiveness. Most of asylum demanders do not take them into account because they are often flying persecution. As a consequence, the importance of the reforms announced to regulate asylum demand in France had a negligible effect on flows. We also find that the elasticity of GDP per capita at origin is negative and significant at 10% (-0.501 in column 8). It means that asylum seekers in France are less likely to come from high income countries.

CONCLUSION

This paper aims to assess the effects of French policies on legal immigration inflows over the period 1995 – 2014. In this study, we proposed three indexes related to admission, integration and asylum regulation. We suppose that variations in indicators follow the changes in policies with regard to their objectives. For this purpose, we adopt a model based on the RUM model micro-foundations. The estimation method relies on a CCE estimator consistent with multilateral resistance and cross sectional dependence encountered in the empirical literature. We also run a pooled OLS estimation using the Driscoll & Kraay standard errors when the residual of the CCE don't fill the condition of independence.

The results of estimations suggest that immigration policies determine the va-riations of inflows but have some limited effects. For example, it has been shown that in spite of tight admission laws, immigrant inflows did not decline over the period of our study, and we find rather a positive and significant effect on these flows. Conversely,

integration laws have a negative and significant effect on flows. We also find that asylum flows are not significantly affected by regulations. Using the robustness DEMIG project indexes, we find that more restrictive global policies have a negative effect on immigration but the magnitude of the changes of these policies have no effects. In addition, restrictive policies for asylum inflows have also few effects.

There are slight differences between the two methods due to the fact that DEMIG index estimates all the types of restrictions where our admission index focuses on admission restrictions into the territory. Despite the differences, the results are consistent with the distribution of the two indexes over time in comparison with migration inflows. Whatever the differences, results also highlight that the dynamics of migration presents an evident gap between policies targeted and immigration flows observed in France. Most of changes in French legislation were intended to attract skilled individual and reduce family and asylum immigration. Based on available data, the results show that these policies fail to significantly reduce migration, especially asylum inflows.

One of the major limit in measuring policies relies on the diversity of policy dimensions (national, European, bilateral or multilateral). The results suggest, especially for asylum inflows, that policies are not significant. Given that asylum inflows also depend on European neighborhood policies, it seems important to question the opportunity of implementing or reinforcing European immigration policies. The question of the implementation of a common EU migration policy with clear objectives can also be raised.

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ANNEX

Annex 1: List of countries in sample

Afghanistan	Albania	Algeria	Angola	Antigua & Barbuda
Argentina	Armenia	Australia	Azerbaijan	Bahrain
Bangladesh	Barbados	Belarus	Belize	Benin
Bhutan	Bolivia	Bosnia & Herzegovina	Botswana	Brazil
Burkina Faso	Burundi	Cambodia	Cameroon	Canada
Cape Verde	Central African Rep	Chad	Chile	China
Chinese Taipei	Colombia	Comoros	Congo	Costa Rica
Cuba	Côte d'Ivoire	D R of Korea	D R of the Congo	Djibouti
Dominica	Dominican Rep	Ecuador	Egypt	El Salvador
Equatorial Guinea	Eritrea	Ethiopia	Fiji	Gabon
Gambia	Georgia	Ghana	Grenada	Guatemala
Guinea	Guinea-Bissau	Guyana	Haiti	Honduras
India	Indonesia	Iran	Iraq	Israel
Jamaica	Japan	Jordan	Kazakhstan	Kenya
Korea	Kuwait	Kyrgyzstan	Laos	Lebanon
Liberia	Libya	Madagascar	Malawi	Malaysia
Maldives	Mali	Mauritania	Mauritius	Mexico
Moldova	Mongolia	Morocco	Mozambique	Myanmar
Namibia	Nepal	New Zealand	Nicaragua	Niger
Nigeria	North Macedonia	Oman	Pakistan	Panama
Paraguay	Peru	Philippines	Qatar	Russia
Rwanda	Saint Kitts & Nevis	Saint Lucia	Samoa	Sao Tome & Principe
Saudi Arabia	Senegal	Sierra Leone	Singapore	Somalia
South Africa	Sri Lanka	Sudan	Suriname	Switzerland
Syria	Tajikistan	Tanzania	Thailand	Togo
Tonga	Trinidad & Tobago	Tunisia	Turkey	Turkmenistan
Uganda	Ukraine	United Arab Emirates	United States	Uruguay
Uzbekistan	Venezuela	Viet Nam	Yemen	Zambia
Zimbabwe				

Annex 2: Sources of policies data

Policy	Year
Loi N° 97-396 du 24 avril 1997 (loi Debré)	1997
Loi N° 98-170 du 16 mars 1998 relative à la nationalité	1998
Circulaire Elisabeth Guigou du 22 octobre 2001	2001
Loi N°2003-1119 du 26 novembre 2003 « relative à la maîtrise de l'immigration, au séjour des étrangers en France et à la nationalité », dite loi Sarkozy	2003
Loi N° 2003-1176 du 10 décembre 2003 sur le droit d'asile	2003
Loi N° 2004-735 du 26 juillet 2004 relative aux conditions permettant l'expulsion des personnes visées à l'article 26 de l'ordonnance n° 45-2658 du 2 novembre 1945	2004
Conseil d'administration de l'OFPRA, sur suggestion du gouvernement, a établi une première liste de « pays d'origine sûrs » adoptée le 30 juin 2005	2005
Loi N° 2006-911 du 24 juillet 2006 relative à l'immigration et à l'intégration	2006
Loi N° 2007-1631 relative à l'immigration, à l'intégration et à l'asile	2007
Loi N° 2011-672, relative à l'immigration, à l'intégration et à la nationalité	2011
Loi N° 2012-1560 du 31 décembre 2012 relative au droit au séjour	2012
Loi N° 2016-274 du 7 mars 2016 relative au droit des étrangers en France	2016

Annex 3: Construction of indexes

Conceptualization

As an initial step toward the construction of immigration policies, conceptualization consist in the description of all the concepts of policies and their respective attributes. In this regard, minimalist or maximalist definitions should be avoided[24]. In addition, for each index, we have to consider the dimensions of the index, and ensure that there is no redundancy or conflation in the concept.

The first barrier that potential migrants face is filling the condition to get visa. Immigrants are often submitted to constraints on visa requirements. For instance, the host authorities use to impose additional documents for legal procedure when they aim to reduce the flows.

Secondly, they have to face the challenge of economic and social integration at destination. Getting access to jobs, residence permits, or equal rights as natives are valuable settings that determine the decision to migrate. The same criteria are also important for people fleeing war and diverse forms of persecutions, generally seeking asylum.

Asylum status is fundamental and many asylum seekers take initially into account the probability of acceptance of demands, and furthermore the level of protection guaranteed in the host country.

In summary, we can identify the three dimensions of policies in the concepts: the first is Entry, the second is integration, and the third is asylum.

1- Access to the territory
- Visa requirements
- Border controls (irregular immigration)

2- Integration
- Access to residence permit
- Access to job
- Access to education
- Access to nationality

3- Asylum
- Conditions to fill to get asylum status
- Probability of the demand acceptance
- Level of protection guaranteed
- Time for waiting the treatment of demand

Measurement

Measurement defines how we select the indicators, define their level, code levels, and find sources. This second step starts by the selection of relevant indicators related to the same concept. One of the key tasks is to minimize the errors in measurement. In particular, it is essential to respect cross-time and cross-space comparisons. Indicators should be simple, quantifiable, and allow to relate unobservable and observable attributes. This task involves more subjective decisions from the researcher. Nonetheless, measurement should maximize homogeneity within classes, and be theoretically and empirically justified. Finally, the choice of measurement level has to facilitate the replicability of the measures.

Some studies (Ortega and Peri 2009, Mayda 2010) choose to shape the changes in policies using dummies. Initial level and changes of policy are not always rigorously justified in empirical literature. Given that the indicators, based on dummies, do not allow a distinction between gradual policy and fundamental reforms, comparison of different indices seems difficult over the time[25].

In the present study, we circumvent this limit by defining how and to what extent the measures could vary. For this purpose, the variation depends on:
- The magnitude of the policy with regard to the size of immigrant population concerned
- The nature of the policy (conjectural or structural), time scale (limited or unlimited)
- The effect targeted (size or composition)

Different weights are used to make the distinction between composition and size expected policies. Thus, we propose a scale of measurement giving a weight of two for size effect policies and one for composition effects. A policy that induces a size effect should significantly increase or decrease immigrant inflows whereas a composition effect should mainly affects the distribution of the groups in the immigration flows. The weight assigned to size effect is the double of composition weight.

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[24] The definition of a concept implies an identification of the attributes of this concept. So, the attributes are a part of the meaning of a given concept. Moreover, according to Munck & Verkuilen (2002), citing Kaplan (1964), conceptualization is both strongly related with theory and an open, evolving activity that is ultimately assessed in terms of the fruitfulness of the theories it helps to formulate.

[25] Although, the majority of indicators set 3 to 11 intervals to differentiate between more and less restrictive policies (Bjerre et al., 2015).

Aggregation
The starting point of aggregation consist in clearly defining how we weight the rules, laws or regulations which account for the attributes of the concepts. The choice of aggregation pertains to multi dimensions of concepts that we have to measure through their attributes. Yet, a higher level of aggregation may lead to the loss of information. Thus, parsimonious concepts might be aggregated with an attention to tractability, and be theoretically testable. The choice of aggregation should be clear in the light of the concerns of parsimony, dimensionality and differentiation.

Annex 4: France Visa waiver program

All European Union Countries, Albania, Andorra, Antigua and Barbuda, Argentina, Australia, Austria, Bahamas, Barbados, Bosnia and Herzegovina, Brazil, Brunei, Canada, Chile, Colombia, Costa Rica, Dominica, El Salvador, Georgia, Grenada, Guatemala, Holy See, Honduras, Hong Kong, Israel, Japan, Kiribati, Macao, Macedonia, Malaysia, Marshall Islands, Mauritius, Mexico, Micronesia, Moldova, Monaco, Montenegro, New Zealand, Nicaragua, Palau, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Serbia, Seychelles, Singapore, South Korea, Switzerland, Taiwan, Timor-Leste (East Timor), Tonga, Trinidad and Tobago, Tuvalu, United Arab Emirates, United States, Uruguay, Vanuatu, Vatican City, Venezuela.

European countries: year of entry

01/01/1958	Belgium, France, Germany, Italy, Luxembourg, Netherlands,
01/01/1973	Denmark, Ireland, United Kingdom
01/01/1981	Greece
01/01/1986	Portugal, Spain
01/01/1995	Austria, Finland, Sweden
01/05/2004	Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia
01/01/2007	Bulgaria, Romania
01/07/2013	Croatia

Les politiques mises en place en France entre 1995 et 2014 pour réguler l'immigration ont-elles été efficaces ?

Résumé - Cet article étudie les effets des politiques françaises d'immigration sur les flux migratoires en provenance de 141 pays sur la période 1995-2014, à partir des évolutions de la législation française en la matière. Nous adoptons un modèle CCE (common correlated error), qui satisfait les hypothèses d'hétéroscédasticité et d'endogénéité en présence de résistance multilatérale dans un modèle de gravité. Nous constatons que deux effets opposés interagissent : les politiques d'admission n'ont pas réussi à vraiment réguler dans le sens attendu les flux migratoires alors que ça a été le cas des politiques restrictives en matière d'intégration. Les changements de réglementation en faveur des migrants qualifiés ont particulièrement attiré les travailleurs étrangers. Quant aux réfugiés, ils ont échappé aux politiques mises en place : les flux d'asile n'ont pas été significativement sensibles à la législation. Les tests de robustesse utilisant les données du projet DEMIG révèlent de la même manière que l'intensité des flux migratoires, notamment de réfugiés, a été peu impactée par les différentes politiques migratoires adoptées.

Mots-Clés
Politique migratoire
Résistance multilatérale
Modèle de gravité
France