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Belgium: the impact  
of citizenship**

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# Employment chances and changes of immigrants in Belgium: the impact of citizenship

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## **ABSTRACT**

This paper looks at the impact of citizenship acquisition on the labour market positions of immigrants in Belgium. Citizenship is open to all immigrants with a sufficient period of legal residence, without any language or integration requirements. In that respect, this study is an important complement to existing studies which have mostly focused on countries with comparatively stricter acquisition rules. Based on Labour Force Survey data for 2008, this study uses probit regression to estimate static and dynamic employment probabilities and unemployment risks. We find that citizenship acquisition is associated with better labour market outcomes for non-Western immigrants in general. This effect remains after controlling for years of residence since migration, indicating the existence of a citizenship premium in Belgium.

Key words: citizenship, employment probability, selection effect, naturalization premium

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## 1. Introduction

Immigrants face many barriers in access to work and particularly to stable jobs that match their qualifications and aspirations. The native-immigrant employment gap remains very significant in many advanced economies and is the subject of both scholarly and public debate. One of the options available to policy makers to improve employment chances is to grant citizenship rights to immigrants in order to open up the full range of rights in different fields: economic, social, civil and political rights, as well as rights to residence and mobility (Huddleston, 2010).

Several studies have considered whether citizenship status is associated with better labour market outcomes, controlled for other characteristics. In many instances citizenship is found to be associated with better labour market outcomes (Chiswick, 1978; Bratsberg et al., 2002; Kogan, 2003; Bevelander and Veenman, 2006; Scott, 2008; Fougère and Safi, 2009; Steinhardt, 2008). However, those who effectively acquire citizenship do not necessarily constitute a random subset of the potentially eligible immigrant population. It is possible that selection mechanisms cause specific immigrants to opt for citizenship of the host country. This means that the observed citizenship effect may simply signal the presence of other unobservable selection characteristics that influence both the probability of being naturalised and that of finding a job.

Belgium offers an interesting case study to measure the impact of citizenship acquisition on employment because unlike many other (and neighbouring) European countries, Belgium does not impose formal conditions for citizenship acquisition other than a sufficient period of legal and permanent residence (seven years). No conditions apply in terms of knowledge of the local languages, integration efforts, labour market status or income. In that respect, this study complements the existing literature which mostly considers countries that impose strict conditions for the acquisition of citizenship. In these countries, immigrants who have acquired citizenship are more likely to be a selected subset, particularly on characteristics for which the survey data do not allow to control.

This paper is structured as follows. First, we briefly elaborate on the complex relationship between citizenship and the labour market position of immigrants. Second, we give some background information on migration and citizenship acquisition policies in Belgium. Third, we formulate hypotheses for the Belgian context and its diverse immigrant population. After a brief description of the available dataset, we estimate propensity of citizenship acquisition in Belgium. We disentangle the impact of acquisition on employment opportunities and unemployment risks using probit analysis for both a static and dynamic approach. Finally, we conclude by evaluating citizenship acquisition as an integration measure of Belgium migration policy.

## **2. Citizenship acquisition and labour market position**

### **2.1. Selection or impact**

Over the past years the labour market position of immigrants received considerable research interest (Borjas, 1995; Neels, 2000; Kogan, 2006; Euwals et al., 2007; Fleischmann and Dronkers, 2007; Münz, 2008; Dustmann, 2009; Reyneri and Fullin, 2008). Especially the weaker performance of non-Western immigrants is a point of focus. An increasing number of studies have looked at the role played by citizenship acquisition (Chiswick, 1978; Bratsberg et al., 2002; Kogan, 2003; Bevelander and Veenman, 2006; Scott, 2008; Fougère and Safi, 2009; Bevelander and Pendakur, 2009; Steinhardt, 2008; OECD, 2010). Granting citizenship can be used by policy makers either as an instrument within the socio-economic integration process or as a reward at the end of this process. When used as a reward, it means that citizenship acquisition is dependent on a specific conditions imposed by the host country (e.g. language proficiency, some basic knowledge of law and customs in the host country). This view on citizenship acquisition is closely linked to the idea of assimilation. In contrast, a multicultural model of society underpins the idea of citizenship as an instrument of socio-economic integration (Jurado, 2008). Citizenship acquisition in itself is then considered as a tool to help people find their place in the host society by granting them all rights attached to citizenship.

The relationship between citizenship acquisition and the labour market position of immigrants is, however, a very complex one, and to some extent endogenous, as we will explain later. Some studies argue that there is a "naturalisation premium". This means that naturalised immigrants perform better in terms of employment than their non-naturalised counterparts. The literature overview in Bevelander and Pendakur (2010) summarizes that studies for the United States and Canada seem to provide support for the existence of such a "naturalisation premium", whereas the support in European studies is rather scattered. European studies have mostly focused on a limited number of countries, namely Sweden, Germany, Austria, France and the Netherlands (see also Table 1).

The factors that provide an explanation for this premium are diverse. A first group of explanations refers to behaviour and attitudes of employers. Employers may be more willing to recruit individuals who have obtained citizenship, as the administrative costs for the employer can be lower, certainly in comparison with foreign employees with a temporary work or residence permit. Moreover, citizenship may act as a signal to employers. Employers consider the acquisition of citizenship as a positive and durable signal of integration in the host country, and as an indication that the immigrant has built up the necessary human and social capital. Hence the potential employee is a 'better risk' by virtue of his intention to stay

(Mazzolari, 2009). The perception of a 'better risk' may also reduce the prevalence of discrimination during the hiring process (VDAB, 2004; Duguet et al., 2007). A second group of explanations relates to the cost-benefit analysis of citizenship take-up the immigrant makes in terms of labour market opportunities<sup>1</sup> (DeVoretz, 2006). Acquiring citizenship possibly reduces or even removes barriers to certain jobs, and thus enables unrestricted access to the labour market (Yang, 1994; Bratsberg et al., 2002). A number of jobs in the public sector are reserved for nationals only (for example activities in justice, national defence and direction of administration). Also certain regulated professions (e.g. medicines, architects, notaries) require host country citizenship. Access to the majority of public service jobs, self-employed and professional occupations is facilitated. Moreover, citizenship acquisition may facilitate upward professional mobility and lead to higher earnings, which are also important considerations (DeVoretz, 2006). In some countries, citizenship may open up additional rights (e.g. in terms of unemployment or other social benefits).

However, if one wants to analyse the impact of citizenship acquisition on employment outcomes, then possible endogeneity cannot be ignored. It is possible that selection mechanisms, that cause specific immigrants to opt for citizenship, are at work. This means that the observed naturalisation effect may simply signal the presence of other unobservable selection characteristics that influence both the probability of being naturalised and that of finding a job. Prior to the citizenship acquisition decision, an immigrant's willingness to invest in human capital that is specific to the host country might increase (Mincer and Pollachek, 1974). The applicant who decides to settle in the host country will foster his investment in education, language and country specific skills (DeVoretz and Pivnenko, 2008). It means that the reason for citizenship take-up can be closely intertwined with the labour market effects of acquiring citizenship. Euwals et al. (2010) distinguish positive and negative selection effects, apart from the possible causality effect. Positive selection means that immigrants who perform well on the labour market are more prone to apply for citizenship (e.g. the higher educated, those who are more socially integrated, or as part of a strategy to find a particular job). If positive selection occurs, then naturalised immigrants will indeed perform better than their non-naturalised counterparts. Negative selection on the contrary means that precisely those immigrants with a weaker socio-economic profile are more interested in citizenship acquisition because of generous welfare state provisions. This means that in the case of negative selection the naturalisation premium will be negative.

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<sup>1</sup> Beside economic considerations, also other relevant issues can play a role here: often mentioned in international literature are the loss of original citizenship, compulsory military service in the country of birth, termination of potential removal of territory (see Steinhardt, 2010 for a more exhaustive list).

In the table below we present an overview of studies that have looked at the impact of citizenship acquisition on the labour market performance of immigrants. The methodological choices are to an important extent driven by the data available. Therefore, we distinguish between studies that use cross-sectional data and those that work with longitudinal material. Although most studies acknowledge the issue of endogeneity, many cross-sectional studies do not take it into account in their empirical analysis (e.g. Kogan, 2003; Euwals et al., 2010; OECD, 2010). Those studies that try to account for possible endogeneity have used different strategies. Most studies of this type have had access to longitudinal data. Bratsberg et al. (2002) were able to control for differences in observed and unobserved individual characteristics. Using a longitudinal panel survey for youths (NLSY) they verified the moment of wage gain (before or after citizenship acquisition) in the hypothesis of stronger investment in human capital by those who wish to naturalize in the future. Fougère and Safi (2009) have used this panel characteristic to perform a bivariate probit regression of the naturalisation and employment decision. Steinhardt (2008) applies pooled OLS estimations and shows that citizenship acquisition has an immediate positive (and boosting) effect on wages. The only study that tries to account for endogeneity using cross-sectional data is from Bevelander and Pendakur (2010), who use an instrumental variable regression. Reproduction of a similar method is not possible for the Belgian case. The applied instrument of years since migration (translated in years since eligibility) is strongly correlated with the errors. It means that years since migration has a strong influence both on employment and on citizenship acquisition. Consequently, the instrumental variable regression cannot be used here to deal with the endogeneity problem (Kelejian, 1973). We will mainly try to distinguish between positive selection and causality effects on the one hand and negative selection on the other (in line with Euwals et al. 2010).

Table 1. Overview of studies that link labour market performance of immigrants with citizenship

<b>Data</b>	<b>No control for selection effect</b>	<b>Control for selection effect</b>
<b>Cross-sectional</b>	Chiswick (1978): US Bratsberg et al. (2002): US Kogan (2003): Austria and Sweden Bevelander and Veenman (2006): Netherlands Devoretz (2008): Canada Scott (2008): Sweden Euwals et al. (2010): Netherlands and Germany OECD (2010): selection of OECD countries	Bevelander and Pendakur (2010): Canada and Sweden (IV regressions)
<b>Longitudinal</b>		Bratsberg et al. (2002): US Scott (2008): Sweden Fougère and Safi (2009): France Steinhardt (2010): Germany

## **2.2. Prior findings**

As already introduced in the previous section, the relation between citizenship acquisition and employment outcomes has been empirically tested in international research. In this section we will briefly describe the findings. Most of these studies focus on labour market outcomes in terms of having a job or not, as well as on the effect on wages. We will add an extra dimension in our empirical analysis by looking at the stability of labour market positions, thus introducing a dynamic component.

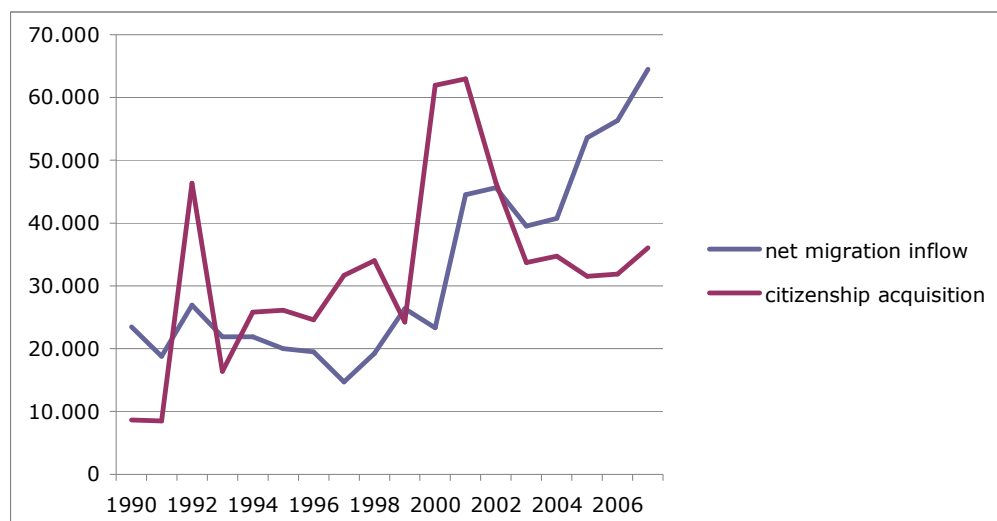
In one of the first studies on the subject, Chiswick (1978) found a positive effect of citizenship acquisition on earnings in the United States, but the effect became insignificant when including years since migration. Kogan (2003) analyzed the impact of citizenship policy on former Yugoslavian immigrants to Sweden and Austria. By means of a multivariate cross-sectional analysis, she indicates that the role of citizenship differs in both countries. In Austria, citizenship opens wider employment opportunities and guarantees similar social rights. Non-Austrian citizens are obviously disadvantaged in the type of employment they get. In Sweden, no naturalization effect is observed. Bevelander and Veenman (2006) analyzed the naturalization effect on Turkish and Moroccan immigrants to the Netherlands with cross-sectional survey data. The results of the multivariate analyses indicate that citizenship acquisition of Turks and Moroccans in the Netherlands is not positively related to employment. Bratsberg et al. (2002) show a positive significant effect of citizenship acquisition on earnings growth of immigrants in the US, employing both cross-sectional and longitudinal data and controlling for differences in observed and unobserved individual characteristics. They find evidence that wage growth accelerates after citizenship acquisition, and that the occupational structure shifts towards more white-collar and public-sector employment. Bevelander and Pendakur (2009) use cross-sectional register data to explore the link between citizenship and employment probabilities for immigrants in Sweden. Through instrumental variable regression they find that citizenship acquisition has a positive impact for a number of immigrant groups, mainly for non-EU immigrants. Fougère and Safi (2009) examine the empirical link between citizenship acquisition of immigrants and their subsequent employment status in France from 1968 to 1999 by means of a bivariate probit model. They find that citizenship acquisition has a significant positive relationship with immigrants' subsequent employability, particularly for groups of immigrants who have a low probability of employment. They find that citizenship acquisition has a very high impact on employment (with a premium of 23 percentage points for both men and women). Scott (2008) finds no naturalization premium for employment probability. The effect of citizenship that turns up in cross-sectional data appears to be caused by characteristics inherent in the group which naturalizes, and not in the state of citizenship itself. Steinhardt (2008) shows that citizenship acquisition plays a role in the economic assimilation process of immigrants in Germany. The longitudinal

analysis shows that mainly Third Country immigrants profit from gaining citizenship. But Steinhardt also finds strong processes of self-selection within the immigrant workforce relative to citizenship acquisition. The initially large wage premium (of 6 percentage points) of naturalized employees compared to third country nationals can be largely explained by differences in observable characteristics, like education and occupation. Overall, the panel estimation has shown that despite controlling for individual heterogeneity the effect of citizenship acquisition remains highly significant and positive.

### 3. Migration and citizenship acquisition in Belgium

The economic recession brought an official migration stop in 1974. This did not halt the net migration inflow. The influx switched towards asylum and mainly family reunification. Some 7.2% of foreign born people legally residing in Belgium come from another country of the European Union and 7.9% from a non-EU country. The most important non-European immigrant groups in terms of magnitude are Turks, Moroccans and Congolese. Figure 1 shows the net annual inflow of foreigners, with a net magnitude of around 65,000 newcomers in 2008. Interestingly, between 1990 and 2003 yearly citizenship acquisitions often surpass net migration inflows. The peaks in the level of citizenship acquisition in 1992 and 2000-2001 were caused by a legal reform which made the acquisition of Belgian citizenship easier. From 2005 onwards citizenship acquisitions remained steady, at a level that is around half of the peak at the start of this century (CECFR, 2008).

Figure 1. Net migration inflow and citizenship acquisition, Belgium, 1990 – 2007



Source: ADSEI



Access to host-country citizenship is often seen as an important element in the integration process. Belgium has still one of the most liberal citizenship acquisition rules in Europe, though recently legislative proposals have been put forward to restrict access to Belgian citizenship (Geddes and Niessen, 2007; OECD, 2010). Becoming a citizen in Belgium is largely unconditional. Having residence or family ties with the country are the major criteria for becoming a national. The 2000 reform of the Belgian Code on Citizenship eliminated the integration test and reduced the residence requirement from five years to three years for most immigrants (and to two for refugees). However, in this case naturalization is granted by a parliamentary commission on a case by case basis, without public criteria or a right of appeal. Besides this discretionary process, legal residents with at least seven years of residence have the unconditional right to acquire citizenship (Geddes and Niessen, 2007). Given this easy access to Belgian citizenship, the share of Belgian citizens in the foreign-born population has increased considerably over the last decade. Whereas in 1993 more than 90% of all foreign born individuals living in Belgium had maintained their foreign citizenship, this has dropped to approximately two thirds in 2008.

In a European context, access to host-country citizenship tends to be conditional. Host countries often impose specific criteria, such as mastery of the host-country language or self-sufficiency (e.g. Germany, Netherlands). However, in Belgium no formal integration efforts are evaluated before citizenship acquisition. This feature makes Belgium an interesting case because we may assume the selection effect is less strong.

The migration reasons of the current stock of immigrants have gradually changed. In the sixties and seventies of last century employment was the main motivation to migrate to Belgium. This employment-based immigration gradually shifted towards immigration based on asylum and family reunification in the early nineties of last century. In a subsample of the 2008 LFS additional information on third country individuals and their labour market incorporation has been gathered. This data source gives an indication of current migration motivations. Today, family reunification is the most important reason immigrants report to come to Belgium. Apart from family reunification, asylum seeking has become a major entry channel for persons originating from other European and sub-Saharan African countries. Only for individuals originating from new EU member states (EU12) more than 40% indicate employment as their most important reason of immigration. It is indeed for citizens of the new EU member states that Belgium allows flexible economic immigration through labour cards and posting (Mussche et al., 2010).

## 4. Hypotheses

In our empirical analysis we focus on the one hand on the propensity of citizenship acquisition and on the other hand on the possible impact of citizenship on immigrants' labour market situation, using for this last item both a static and a more dynamic indicator.

With respect to the acquisition of Belgian citizenship, we expect considerable variety according to country of origin, as the country of origin is closely linked to the migration motive and the entry channel. Moreover, the institutional setting is broadly speaking different for Western and non-Western born immigrants. For immigrants coming from Western countries, we expect on the one hand higher citizenship acquisition rates for those that came in the first migration waves (i.e. prior to 1974, mainly Italians) given their long history in Belgium and their low probability of return to the country of origin. On the other hand, for more recent immigrants of the EU-15 and also for immigrants coming from the countries that joined the EU in 2004, we expect a much lower propensity for naturalisation, given the freedom of movement within the European Union and the (quasi-) equality of rights. A similar reasoning applies for those coming from other high income countries, like the United States and Canada. For people coming from other countries (mainly North and Central Africa and Turkey), we expect on the contrary a higher propensity for citizenship take-up, as the benefits for these groups probably outweigh the costs, especially when original citizenship nationality can be preserved.

Our second set of hypotheses relates to the effects of citizenship on the labour market situation, looking at the employment probability on the one hand and at job stability on the other. Do we find a positive, a negative or no effect? A negative effect points to negative selection, whereas a positive effect can either be due to positive selection or causality, i.e. the "naturalisation premium" (Euwals et al., 2010). *"It will not be possible to tell which positive impact is most important. But it is good news for policy to find a positive impact, independent of the fact whether it is caused by a positive causal effect or a positive selection effect"* (Euwals et al., 2010: 518). Also here we expect to find considerable variety according to country of origin. For individuals coming from the EU (both older and newer member states) we expect to find no effect, given the fact that citizenship acquisition for this group only makes a difference in terms of (some) political rights. There may be a slightly negative effect, in the sense that older, low educated immigrants who arrived before the seventies for jobs in mining and industry now have more difficulties to find a job. This last factor may also play a role for immigrants coming from Turkey and Morocco prior to 1974. For the other groups of immigrants coming from non-Western countries the effect can go either way: it is possible that positive selection plays a role, or that granting citizenship indeed works as an instrument of integration, or – on the contrary – that the more vulnerable groups aim for better social protection (and political

protection in the case of refugees). In order to understand the relation between citizenship and employment in a more precise way we cover different types of employment. In the hypothesis of the existence of a naturalisation premium, we expect better outcomes in public employment and/or stability of employment for those who have acquired Belgian citizenship.

## 5. Data

We use the Belgian Labour Force Survey (LFS) data for our analysis. In Belgium the LFS is cross-sectional without a longitudinal panel. The data set contains information on the employment status of legal residents. The sample is taken from the National Registry, which implies that not all categories of immigrants are represented. The National Registry contains information on all individuals registered in the population register (Belgians residing in a Belgian municipality and foreigners holding a permanent residence permit), the register of foreigners (foreigners holding a temporary residence permit, recognised refugees and regularised asylum seekers) and the register of EU civil servants. Hence, Belgians living abroad, asylum applicants<sup>2</sup> (waiting register) and undocumented immigrants (so-called '*sans papiers*') are not covered by the sample (Federal Public Service for Economy, Directorate-General for Statistics and Economic Information).

This analysis is limited to the population aged 25 to 64. We also excluded the respondents who indicate to have acquired Belgian citizenship within the first year of residence in Belgium<sup>3</sup>. Our sample consists of 4,341 Western born immigrants and 4,898 non-Western born immigrants. We distinguish eight groups of immigrants, based on country of birth. Western immigrants are divided over three groups, namely the pre-2004 EU member states (EU15), the 12 new member states (EU12) and North America. We also cluster five groups of non-Western immigrants, namely those originating from other European countries (mainly Turkey), North African countries (mainly Morocco), sub-Saharan African countries, South America and Asia.

As regressors we use socio-demographic, context, and migrant-specific variables. The socio-demographic variables include gender, age (in categories), civil status and presence of children in the household as well as educational attainment. As in Belgium also regional discrepancies play a significant role in employment probabilities, the region of residence is

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<sup>2</sup> Article 4 of the Law of 4 May 1994 on the waiting register for asylum seekers stipulates that foreigners on the waiting register are not eligible for inclusion in the annual population figure.

<sup>3</sup> Almost 42% of the newly arrived immigrants ( $ysm = 1$ ) indicate to have Belgian citizenship. We suppose these groups are mainly descendants of Belgians living abroad or have obtained Belgian citizenship through marriage or via parents, and for that reason they are not of interest for this study. Consequently, they are excluded from the analysis.

included as a context variable. For the migrant-specific characteristics we use years since migration (and squared years since migration), Belgian citizenship acquisition and country of origin.

## **6. Results**

The empirical analysis consists of three steps. In the first section we analyze the propensity of citizenship acquisition as a dependent variable. Using a probit regression we look at which subgroups of different background are more prone to obtain naturalization and why. In the second step we focus on the relation between citizenship and employment probability. We identify the main covariates of employment probability for Western born and non-Western born males and females. Additionally, we focus on different types of employment to further explore the existence of a citizenship acquisition premium. Thirdly, a dynamic dimension is introduced, by investigating whether citizenship influences stability in employment and unemployment. Stability is defined as having the same employment status in two subsequent periods<sup>4</sup> (t-1 and t).

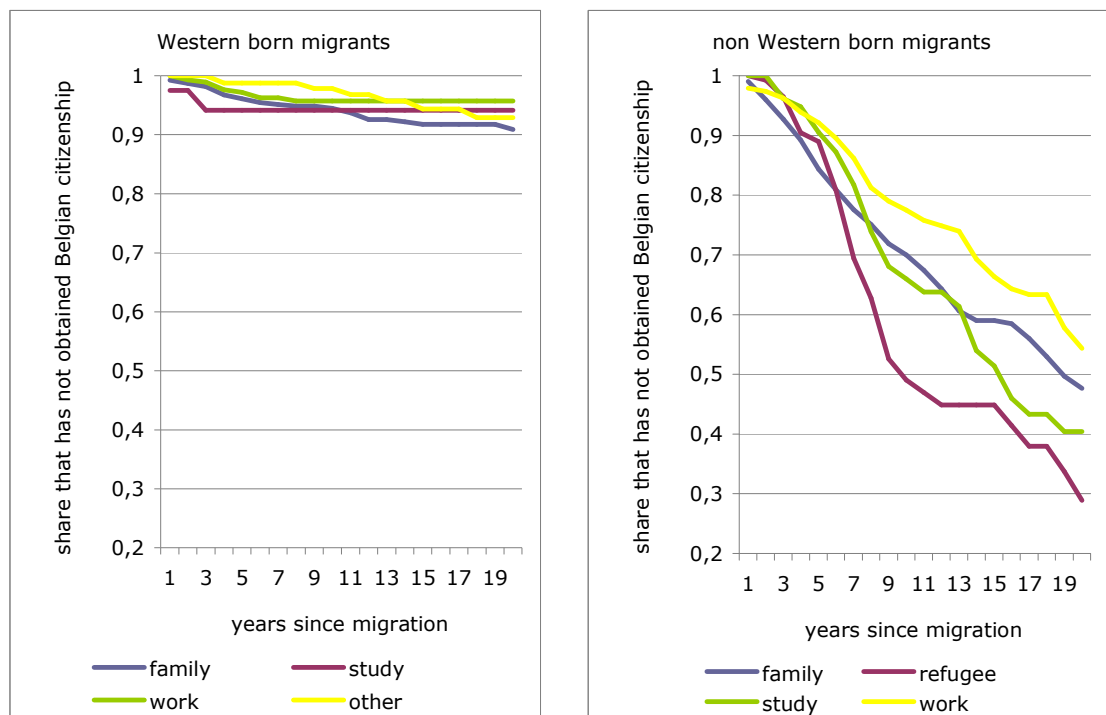
### **6.1. The propensity for citizenship acquisition**

Figure 2 shows survivor functions of citizenship acquisition over years since migration by main migration reason for the migrant population in 2008. Given divergent acquisition rates and migration motives between Western born and non-Western born immigrants, we have estimated citizenship acquisition separately for both groups. For Western born individuals (left graph in Figure 2) the propensity to naturalize is limited and most outspoken for those who come for family reunification. Among non-Western born immigrants (right graph in Figure 2) the propensity to naturalize is clearly more prominent. After 15 years of residence, around 50% of all non-Western groups have acquired Belgian citizenship, with higher proportions for refugees and students.

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<sup>4</sup> We describe transition from t-1 to t, but we have no information on what occurred in between. Consequently we consider those who lost their job and found another job within one year to be in a steady position.

Figure 2. Survivor function of citizenship acquisition by migration motivation over years since migration, Western country of origin (left figure) and non-Western country of origin, Belgium, 2008.



Source: Labour Force Survey, ad hoc module 2008  
(respondents are those older than 15 at arrival who filled the question on residence period)

Possible reasons for the limited take-up among Western born immigrants may lie in the confined benefits of citizenship acquisition for this group (because of free movement, transferable rights from the country of origin and return migration). This picture is confirmed in Table 2 (A), showing probit estimates of citizenship acquisition controlling for socio-demographic and education characteristics, region and years since migration. The share of individuals who have chosen for Belgian citizenship is presented for several groups of origin. Even among non-Western born immigrants a certain variety can be seen. The groups with the weakest labour market position clearly appear most eager to take up citizenship. Among African immigrants acquisition rates exceed non-Western averages by around 10 percentage points.

In Table 2 (B), we can also see that citizenship acquisition propensity for women is a little higher than for men. However, this is only the case for those immigrants from the old EU member states and from African countries. For European immigrants (also non EU-27) citizenship acquisition is most prominent among younger age groups. This is consistent with the human capital hypothesis. The younger the age at citizenship acquisition, the greater the lifetime benefits an immigrant can

expect to accrue. On the contrary, for non-Western immigrants no discrepancy by age can be observed. They are probably more eager to stay in Belgium regardless of age. For non EU European and sub-Saharan immigrants, married individuals are more likely to become Belgian, possibly through marriage itself (and/or family reunification). Being employed increases citizenship acquisition for North African and South American immigrants. As explained in the theoretical framework, and further elaborated in the next section, endogeneity is an issue here.

Remarkable is the general absence of any relationship between the level of education and the propensity to obtain Belgian citizenship among non-Western immigrants. The only sub-group from whom the level of education matters concerns are sub-Saharan immigrants; their probability to acquire Belgian citizenship increases with 14.3 percentage points if they have tertiary education, compared to those with only primary education. However, and entirely consistent with our hypothesis of only limited selection effects due to Belgium's liberal citizenship acquisition rules, we can see from Table 2 that years since migration is the most important factor explaining citizenship acquisition likelihood in Belgium. For all origin groups, every additional year of residence increases the likelihood of having acquired citizenship – for non-Western immigrants by around 8 percentage points.

Table 2. Propensity of citizenship acquisition, (A) cases and share of foreign born with Belgian citizenship, (B) marginal effects of probit regression, Belgium, 2008.

**(A)**

	EU15	EU12	North America	Total Western	non EU Europe	North Africa	sub-Sahara Africa	South America	Asia	Total non-Western
nbr of cases	3,748	519	74	4,341	1,104	1,390	948	806	650	4,898
citizenship acquisition	20.65	19.65	17.57	22.48	49.82	58.27	61.5	49.51	50.77	55.26

**(B)**

	EU15	EU12	North America	Total Western	non EU Europe	North Africa	sub-Sahara Africa	South America	Asia	Total non-Western
dependent var (reference)										
sex (female)	-0.068***	-0.025	0.001	-0.071***	-0.030	-0.032	-0.138***	-0.064	-0.084	-0.065***
age (25-35)										
35-44	-0.056***	0.001	0.000	-0.046***	-0.001	0.071	0.051	0.105	-0.081	0.034
45-54	-0.074***	-0.050*	0.000	-0.071***	-0.172**	-0.008	0.083	-0.034	-0.250**	-0.053
55-64	-0.121***	-0.047*	0.000	-0.121***	-0.160*	0.031	-0.025	0.031	-0.199	-0.065
civil status (unmarried)	-0.017	0.018	0.000	-0.004	0.164***	0.033	0.091*	0.247*	0.030	0.066**
presence of children in HH (at least 1)	0.010	0.012	0.000	0.016	-0.014	-0.128***	-0.053	0.035	0.007	-0.058**
education (primary)										
secondary education	0.037**	-0.080*	0.000	0.033*	0.051	0.025	0.085	0.187	-0.032	0.067**
tertiary education	0.057**	-0.007	0.000	0.061***	0.081	-0.035	0.143*	-0.005	-0.138	0.053
region of residence (Flanders)										
Brussels	-0.083***	-0.084*	0.000	-0.084***	-0.065	0.003	-0.010	-0.264*	-0.064	-0.035
Walloon region	-0.016	0.026	0.000	-0.012	0.040	0.065	0.081	0.156	0.069	0.080**
employed (no)	0.000	0.005	-0.309	-0.005	0.074	0.190***	-0.005	0.224*	0.048	0.125***
ysm	0.017***	0.032***	0.000	0.018***	0.089***	0.077***	0.055***	0.098***	0.111***	0.075***
ysm2	-0.000***	-0.000***	0.000	-0.000***	-0.001***	-0.001***	-0.001***	-0.002***	-0.002***	-0.001***

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Source: Labour Force Survey, 2008, own calculations.

## 6.2. Citizenship acquisition and employment / unemployment

As earlier research has documented, non-Western immigrants in Belgium experience a higher risk of poverty and have lower chances of employment (Corluy and Verbist, 2010). Non-Western immigrants have an employment rate of 49.7 percent. This means an employment gap of 21.7 percentage points with natives. Here, we seek to establish whether citizenship acquisition makes a difference, using probit estimation of employment probability (ILO definition of employment status).

Table 3 presents the employment rates for different origin groups of immigrants by sex. Overall, we find clear differences in employment probabilities for those who have obtained Belgian citizenship and those who have not. The direction of the difference, however, varies by country of origin. Western born immigrants who are not Belgian nationals have a higher employment probability than their naturalised counterparts. This is especially the case for men; for women the employment rate is either the same (EU-12) or higher for the naturalised group (North America). For all non-Western groups, naturalised immigrants exhibit a far higher employment chance, and this is true for both men and women. The gap is highest for men born in North Africa (15.4 percentage points). These results point in the direction of a naturalisation premium. However, as composition effects may play a role here, we now turn to the results of the probit regressions estimating employment probabilities, controlling for individual demographic, socio-economic and context characteristics.

Table 3. Observed employment rates by origin groups for gender and citizenship acquisition, population 25-64y., Belgium, 2008.

	males		females		all	
	Belgian citizenship	no Belgian citizenship	Belgian citizenship	no Belgian citizenship	Belgian citizenship	no Belgian citizenship
Belgium	0.782	0.755	0.649	0.590	0.715	0.680
EU15	0.701	0.753	0.506	0.592	0.575	0.676
EU12	0.719	0.887	0.514	0.529	0.578	0.695
North America	0.714	0.931	0.500	0.406	0.615	0.656
Total Western born immigrants	0.703	0.770	0.507	0.580	0.576	0.678
Non EU Europe	0.627	0.586	0.366	0.288	0.489	0.431
North Africa	0.629	0.475	0.269	0.202	0.457	0.345
sub-Sahara Africa	0.751	0.610	0.595	0.404	0.659	0.507
South America	0.774	0.743	0.606	0.435	0.657	0.538
Asia	0.724	0.690	0.557	0.285	0.636	0.481
Total non-Western born immigrants	0.672	0.578	0.438	0.295	0.547	0.434

Source: Labour Force Survey, 2008, own calculations.



Table 4 identifies the main covariates of employment probability for Western born and non-Western born males and females (A). Separate regressions are run within each origin group to detect the importance of citizenship on employment. Besides, we run the regressions for specific immigrant groups (B), controlling for individual characteristics.

There is a striking gender employment gap for immigrants in general –over 20 percentage points–. The gap can be explained by markedly lower female participation rates. Belgium generally has a comparatively low employment rate for older workers (55-64 y); the deficit is less marked for workers of migrant descent. Standard gradients are found by level of education; the higher educated are significantly more likely to be employed. The place of residence, and more specifically the region also matters. Non-Western born immigrants living in the Walloon or Brussels region are less likely to be employed than those residing in the Flemish region; the difference is around 7.5 percentage points.

We now look at the importance of migrant specific characteristics and particularly at the effect of having obtained Belgian citizenship. For non-Western born immigrants, Belgian citizenship is clearly associated with significantly higher employment probabilities, also when controlled for the number of years since migration. The effect is stronger for non-Western born women.

However, as we have seen in Table 2, the propensity to acquire citizenship in Belgium is very strongly related to the duration of an immigrant's residence in Belgium. Hence it is difficult to separate out the 'pure' effect of citizenship.

Running within group probit estimations (part (B) of Table 4) offers a more detailed insight into the effect of having citizenship by country of origin. Controlling for the variables contained in Part A of the same table, citizenship is associated with significantly better employment probabilities for North African and South American born immigrants, but not for non-EU European (mainly Turks), sub-Saharan and Asian immigrants.

Table 4. Probability of employment, marginal effects, (A) probit regression by origin (Western and non-Western) and sex, (B) probit regression by detailed group of origin (only effect of citizenship), Belgium, 2008.

**(A)**

dependent var (reference)	Western countries of origin						non Western countries of origin					
	All		Male		Female		All		Male		female	
sex (female)	0.238***	0.239***					0.258***	0.286***				
age (25-35)												
35-44	0.047*	0.035	0.02	0.028	0.054	0.023	0.03	0.003	0.004	-0.011	0.044	0.006
45-54	-0.004	-0.008	-0.029	-0.013	-0.009	-0.037	-0.011	-0.088***	-0.051	-0.110**	-0.006	-0.090**
55-64	-0.325***	-0.311***	-0.309***	-0.265***	-0.353***	-0.366***	-0.191***	-0.290***	-0.243***	-0.328***	-0.158***	-0.252***
civil status (unmarried)	-0.037*	-0.028	0.068**	0.065**	-0.138***	-0.121***	-0.047*	-0.016	0.048	0.069*	-0.123***	-0.086***
presence of children in HH (at least 1)	-0.03	-0.032	-0.082***	-0.089***	0.03	0.034	-0.014	-0.001	-0.057*	-0.050*	0.043	0.062*
education (primary)												
secondary education	0.171***	0.175***	0.160***	0.159***	0.155***	0.165***	0.215***	0.179***	0.157***	0.146***	0.248***	0.191***
tertiary education	0.302***	0.303***	0.241***	0.235***	0.322***	0.332***	0.341***	0.306***	0.268***	0.244***	0.384***	0.340***
region of residence (Flanders)												
Brussels	-0.014	-0.012	0.002	-0.01	-0.041	-0.036	-0.071***	-0.073***	-0.062*	-0.065*	-0.068**	-0.065*
Walloon region	-0.013	-0.012	-0.01	-0.005	-0.015	-0.023	-0.053*	-0.077**	-0.054	-0.066*	-0.037	-0.067*
ysm		0.003		0.003		0.002		0.003		0.001		0.006
ysm2		-0.000*		-0.000*		0		0		0		0
BE citizenship (no)		0		-0.024		0.017		0.125***		0.105***		0.120***
origin (EU15)												
EU12		-0.051		0.052		-0.132***						
North America		-0.150*		0.054		-0.302***						
origin group (nonEU Europe)												
North Africa								-0.056*		-0.04		-0.073*
Sub Sahara Africa								0.097***		0.047		0.116***
South America								0.156***		0.129*		0.160**
Asia								0.068*		0.091**		0.038

**(B)**

within group of origin:	EU15	EU12	North America				non EU Europe	North Africa	sub-Sahara Africa	South America	Asia	
BE citizenship (no)	-0.001	-0.029	-0.759***				0.08	0.198***	-0.002	0.245*	0.047	

Source: Labour Force Survey, 2008, own calculations.

Table 5 shows whether citizenship is associated with immigrants' increased access to permanent and public employment, which may serve as a further indication of a possible citizenship effect. Citizenship increases the probability of having a permanent job for non-Western born immigrants, especially for men, with an additional effect of length of residence. For non-Western immigrants there is no significant effect. When it comes to public employment, Western immigrants, and especially EU15 immigrants, seem to benefit strongly from acquiring citizenship. This relation is smaller for non-Western immigrants, but significant. Public employment refers to a broad sector and not all of these jobs (formally) require Belgian citizenship.

Table 5. Probability of employment with permanent contract (A) and public employment (B), by origin (Western and non-Western) and sex, marginal effects of probit regression, Belgium, 2008.

(A)

	Western countries of origin			Non-Western countries of origin		
	all	male	female	all	male	female
ysm	0.005**	0.005	0.004	0.005*	0.000	0.009**
ysm2	-0.000**	-0.000*	-0.000*	0.000	0.000	-0.000*
BE citizenship	0.029	0.066	0.012	0.106***	0.113***	0.085***

(B)

	Western countries of origin			Non-Western countries of origin		
	all	male	female	all	male	female
ysm	-0.001	-0.001	-0.001	0.000	-0.002	0.002
ysm2	0.000	0.000	0.000	0.000	0.000*	0.000
BE citizenship	0.071***	0.140***	0.023	0.026**	0.029*	0.020

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Only marginal effects for migrant-specific characteristics are presented, controlled for sex, age, civil status, household composition, education and regional characteristics.

Source: Labour Force Survey, 2008, own calculations.

### 6.3. Stability in employment and unemployment

Whereas the previous section focused on static indicators of employment probability, we want to gain a better understanding of the influence of citizenship on immigrants' labour market position by introducing a dynamic component in the analysis. The lower employment probabilities of immigrants may not show underlying movements in terms of switching from employment to unemployment or inactivity. It is possible that immigrants have lower employment probabilities, but a higher degree of labour market transitions, which might remedy their weaker labour market position to a certain extent. Table 6, however, shows that this mechanism is only partially at work in Belgium, as non-Western immigrants display a lower degree of employment stability, even though the difference is not very large. Here we define stability as having the

same labour market status in both 2007 and 2008<sup>5</sup>. Non-Western born immigrants have a lower probability for stable employment, namely 89%, compared to 96% Belgian natives. However, their unemployment stability is higher (47% for non-Western immigrants, compared to 32% for Belgian natives), which goes contrary to the results found for Southern European countries, where immigrants move more frequently in and out of unemployment (Reyneri and Fullin, 2008). We now turn to the role citizenship plays in these stability patterns.

Table 6. Transitions from labour market status at *t-1* to employment status at *t* by origin (native, Western born and non-Western born), 25-64y., Belgium, 2008.

<i>t-1</i> \ <i>t</i>		employed	unemployed	inactive	total
Belgian native	employed	96.0	1.5	2.4	100.0
	unemployed	17.9	32.3	49.9	100.0
	inactive	4.9	2.0	93.1	100.0
	total	71.4	3.5	25.1	100.0
Western country of birth	employed	94.8	2.3	2.9	100.0
	unemployed	19.4	30.9	49.7	100.0
	inactive	7.4	4.8	87.8	100.0
	total	65.7	5.0	29.3	100.0
non-Western country of birth	employed	89.2	6.3	4.5	100.0
	unemployed	18.9	46.6	34.5	100.0
	inactive	9.3	11.8	78.8	100.0
	total	49.7	13.7	36.6	100.0

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: Labour Force Survey, 2008, own calculations.

Table 7 (columns 1 and 4) shows the determinants of stability in employment for Western and non-Western immigrants respectively. For both groups the level of education has a significant impact: non-Western born immigrants have a 8.2 percentage points higher probability to have stable employment when they have completed tertiary education compared to those with only a primary education degree (all other characteristics equal). For Western born immigrants the effect is 2.9

<sup>5</sup> For determining stability of employment and unemployment we combined the retrospective question "self-defined situation with regard to activity one year before survey" and "current ILO employment position" in the LFS 2008. The requirements to fit in the ILO unemployment definition (without work, currently available for work and seeking work) may not be respected by those who define their previous employment status as unemployed. High rates of inactivity in *t* for those unemployed in *t-1* are possibly due to combination of self-defined and ILO employment status. Moreover, as shown in Table 8, propensity to switch from unemployment to inactivity is higher for older age groups. The demographic composition of natives and western migrants therefore appears to account for the relatively more frequent transitions towards inactivity.

percentage points lower, but still significant. Citizenship does not play a role for this group. For non-Western born immigrants, however, Belgian citizenship leads to 4.1 percentage points higher probability of stable employment compared to those without. All the other covariates turn out to be insignificant. Thus, we can conclude that citizenship acquisition improves a stable employment probability. For those moving from employment in 2007 to either unemployment or inactivity in 2008, citizenship turns out to be insignificant.

Table 7. Probability of labour market status in  $t$  for those who have been employed at  $t-1$ , bivariate probit regression, marginal effects, 25-64y., Belgium, 2008.

	Western country of origin			Non Western country of origin		
	employment	unemployment	inactive	employment	unemployment	inactive
sex (female)	0.021*	0.000	-0.019**	0.018	0.015	-0.034***
age (25-35)						
35-44	0.006	0.008	-0.013*	-0.011	0.016	-0.006
45-54	0.015	0.001	-0.013*	0.010	0.003	-0.013
55-64	-0.024	-0.009	0.026	0.014	-0.027	0.011
civil status (unmarried)	0.017	-0.016*	-0.001	0.027	-0.025*	0.000
presence of children in HH (at least 1)	-0.011	0.006	0.004	-0.018	0.012	0.005
education (primary)						
secondary education	-0.005	-0.001	0.005	0.034*	-0.022	-0.009
tertiary education	0.029*	-0.015	-0.011	0.082***	-0.055***	-0.021*
region of residence (Flanders)						
Brussels	-0.018	-0.002	0.020*	-0.012	0.009	0.001
Walloon region	-0.011	0.002	0.011	0.002	-0.004	0.001
ysm	0.001	0.000	-0.001	0.001	0.000	0.000
ysm2	0.000	0.000	0.000	0.000	0.000	0.000
BE citizenship (no)	0.002	-0.001	-0.002	0.041*	-0.018	-0.023

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: Labour Force Survey, 2008, own calculations.

When it comes to stability in unemployment, the pattern is somewhat different (Table 8), as non-Western born immigrants are more likely to remain unemployed than their Western born counterparts. For non-Western born immigrants, the regional dimension is the only one that provides a significant explanation. In Brussels, there is a high concentration of non-Western immigrants with a weak socio-economic profile, combined with fewer economic perspectives for low-skilled individuals. Citizenship does not play a role here, also not for the transition from unemployment to employment. However, for Western born immigrants, citizenship is a significant factor in explaining their unemployment lock-in. Apparently, there may be a negative selection effect playing for this group, which is also illustrated by the negative

marginal effect of -0.083 for individuals switching from unemployment to employment.

Table 8. Probability of labour market status in  $t$  for those who have been unemployed at  $t-1$ , bivariate probit regression, marginal effects, 25-64y., Belgium, 2008.

	Western country of origin			Non-Western country of origin		
	employment	unemployment	inactive	employment	unemployment	inactive
sex (female)	0.035	0.134*	-0.237***	0.008	0.133**	-0.152***
age (25-35)						
35-44	0.024	-0.01	0.006	-0.102***	0.086	0.086
45-54	-0.027	-0.037	0.197	-0.123***	0.119	0.072
55-64	-0.170***	-0.206*	0.490***	-0.186***	-0.226**	0.498***
civil status (unmarried)	-0.054	-0.053	0.126*	-0.063	0.024	0.046
presence of children in HH (at least 1)	-0.023	-0.001	0.023	0.016	-0.006	-0.015
education (primary)						
secondary education	0.059	0.071	-0.146*	-0.014	0.095	-0.076
tertiary education	0.145	0.036	-0.236*	0.061	0.089	-0.155**
region of residence (Flanders)						
Brussels	-0.03	-0.058	0.131	-0.130***	0.155**	0.001
Walloon region	-0.032	-0.094	0.182*	-0.115***	0.124	0.057
ysm	0.004	0.002	0	-0.005	0.005	0
ysm2	0	0	0	0	0	0
BE citizenship (no)	-0.083*	0.192**	-0.109	0.029	0.032	-0.062

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: Labour Force Survey, 2008, own calculations.

## 7. Conclusion

This paper examined whether Belgian citizenship makes a difference to the employment position and stability of immigrants in that country. Belgium makes for a particularly interesting case as Belgian citizenship is open to all immigrants with a sufficient period of legal residence, and is not conditional upon language, work or integration requirements. In that respect the study complements the existing literature, which mostly focuses on countries where such conditions for citizenship acquisition are in place and where, as a consequence, immigrants who manage to acquire citizenship rights are more likely to be a selected subset of the resident migrant population.

We find that, by and large, the main predictor of Belgian citizenship acquisition is the duration of residence. Additionally we find no marked or statistically significant effect of socio-demographic or socio-economic characteristics for the acquisition of Belgian citizenship. The main focus of this study is the impact of citizenship on immigrants' employment chances. Here the conclusions are different for Western and non-Western-born immigrants. Employment chances of Western immigrants are very

similar to those of natives and are only significantly affected by observable socio-economic characteristics. The length of residence in Belgium and Belgian citizenship do not have a significant impact. By contrast, for non-Western immigrants, having Belgian citizenship contributes positively to their employment chances. The effect is strong and unaffected by controls for length of residence. This strongly suggests that obtaining Belgian citizenship in itself has an impact on the labour market inclusion of immigrants. The strong positive effect of citizenship on the likelihood to be in a public sector job or in permanent employment is also consistent with that interpretation. Our analysis subsequently considers whether citizenship affects the stability of employment and unemployment over a one year timeframe. Although the impact of educational attainment dominates, Belgian citizenship additionally increases the probability of stable employment from one period to another. However, for the likelihood of exiting unemployment we do not find significant effects for non-Western immigrants.

The better labour market outcomes -both in a static and a dynamic sense- of immigrants who acquired Belgian citizenship, may be attributable to a mix of factors. A standard explanation is that immigrants intend to acquire citizenship rights invest more in human capital that is specific to the host country. For Belgium this factor does not seem to play strongly. Educational attainment does not matter much when it comes to citizenship acquisition. Perhaps this is not surprising in view of Belgium's liberal citizenship acquisition regime. Only among Western and sub-Saharan immigrants we find the higher educated to be more likely to become Belgian, but we cannot ascertain if this is because of human capital investments after their arrival. Secondly, obtaining Belgian citizenship can help to overcome institutional labour market barriers. In effect, public sector employment, for which citizenship generally matters, is more pronounced among those who obtained Belgian citizenship. There are further potential explanations that we cannot confirm or falsify on the basis of the available data. Belgian citizenship may have a signal effect to employers over and above length of residence; it may be taken as a signaling commitment to the new country of residence and hence, indirectly, to the job offered. Note in this context that hiring and dismissal costs are significant in a relatively strongly regulated labour market, such as the Belgian one. Finally, Belgian citizenship may have motivational and psychological effects that affect job search intensity and success.

The findings of this study provide an indication of a statistically significant positive relationship between citizenship acquisition and employment chances in Belgium. However we should be careful with drawing policy implications from these results. A statistically significant positive relationship does not necessarily mean there is any direct causality. It is plausible there is but we the cross-sectional data we have do not allow to come to firm judgments. It is also worth emphasizing that labour market outcomes of non-Western immigrants in Belgium remain very problematic. Those who have Belgian citizenship do better, but outcomes remain far

from satisfactory. In subsequent research, we intend to focus on other policy aspects, including (regional) labour market integration efforts.

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## **Bibliography**

- Bevelander P. and Veenman J. (2006) Naturalization and employment integration of Turkish and Moroccan immigrants in the Netherlands. *Journal of International Migration and Integration* 7(3): 327-349.
- Bevelander P. and Pendakur R. (2009) Citizenship, co-ethnic populations and employment probabilities of immigrants in Sweden. *IZA Discussion Paper Series* 4495 Bonn: IZA.
- Borjas G. (1995) The Economic Benefits of Immigration. *Journal of Economic Perspectives* 9(2): 3-22.
- Bratsberg B., Ragan J.F. and Nasir Z.M. (2002) The effect of naturalization on wage growth: A panel study of young male immigrants. *Journal of Labour Economics* 20: 568-597.
- CECFR (2008) Toegang tot het grondgebied en internationale bescherming. *Jaarrapport 2008* Brussels: CECFR, 18-37.
- Chiswick B. (1978) The effect of Americanization on the earnings of foreign-born men. *The Journal of Political Economy* 86: 897-921.
- DeVoretz D. (2006) The Economics of Citizenship: A Common Intellectual Ground for Social Scientists? *IZA Discussion Paper Series* 2392 Bonn: IZA.
- Devoretz D.J. and Pivnenko .S (2008) The economic determinants and consequences of Canadian citizenship ascension. In: Bevelander P. and Devoretz D.J. (eds.) *The Economics of Citizenship*. Malmö: Holmbergs, 21-62.
- Duguet E., Leandri N., L'Horty Y. et al. (2007) Discriminations à l'embauche - Un testing sur les jeunes des banlieues d'Île-de-France. *Rapports et documents* Paris: Centre d'analyse stratégique.



- Dustmann C., Glitz A. and Vogel T. (2009) Employment, Wages, and the Economic Cycle: Differences between Immigrants and Natives. *IZA Discussion Paper Series* 4432 Bonn: IZA.
- Euwals R., Dagevos J., Gijsberts M. et al. (2010) Citizenship and Labour Market Position: Turkish Immigrants in Germany and the Netherlands. *International Migration Review* 44(3): 513-538.
- Fleischmann F. and Dronkers J. (2007) The Effects of Social and Labour Market Policies of EU-countries on the Socio-Economic Integration of First and Second Generation Immigrants from Different Countries of Origin. *EUI Working Papers* 19 Florence: Robert Schuman Centre for Advanced Studies.
- Fougère D. and Safi M. (2009) Naturalization and employment of immigrants in France (1968 - 1999). *International Journal of Manpower* 30 (1/2): 83-96.
- Geddes A. and Niessen J. (2007) *European Civic Citizenship and Inclusion Index*. Brussels: British Council.
- Huddleston T. (2010) Promoting citizenship: the choices for immigrants, advocates, and European cooperation. In: Zapata-Barrero R. (ed.) *Citizenship policies in the age of diversity. Europe at the crossroads*. Barcelona: CIDOB Foundation, 157-172.
- Jurado E. (2008) Citizenship: tool or reward? The role of citizenship policy in the process of integration. *Policy network paper*. London: Policy network.
- Kelejian H. (1973) Two-Stage Least Squares and Econometric Systems Linear in Parameters but Nonlinear in the Endogenous Variable. *Journal of the American Statistical Association* 66: 373-374.
- Kogan I. (2003) Ex-Jugoslavs in the Austrian and Swedish labour markets: The significance of period of migration and the effect of citizenship acquisition. *Journal of Ethnic and Migration Studies* 29: 595-622.
- Kogan I. (2006) Labour markets and economic incorporation among recent immigrants in Europe. *Social Forces* 85 (2): 697-721.
- Mazzolari F. (2009) Dual Citizenship Rights: Do They Make More and Richer Citizens? *Demography* 46: 169-191.
- Mincer J., Polachek S. (1974) Family Investments in Human Capital: Earnings of Women. *Journal of Political Economy* 84: 76-108.
- Münz, R. (2008) Migration, labour markets and Integration of Immigrants: An Overview for Europe. *Economic Department Working Papers* 284 Paris: OECD Publishing.
- Mussche N., Corluy V. and Marx I. (2010) *Satisfying Labour Demand through Migration in Belgium*. Brussels: Belgian Contactpoint for European Migration Network.

- Neels, K. (2000) Education and the transition to employment: young Turkish and Moroccan adults in Belgium. In: Lesthaeghe R. (ed.) *Communities and Generations*. Brussel: VUB, 279-320.
- OECD (2008) The labour market situation and impact of recent third country immigrants. *Employment in Europe 2008* Paris: OECD, 43-110.
- OECD (2010) Naturalisation and the labour market integration of immigrants. *Migration Outlook 2010*. Paris: OECD, 158-187.
- Reyneri E. and Fullin G. (2008) New Immigration and Labour Markets in Western Europe: a Trade-off between Employment and Job Quality? *Transfer* 14(4): 573-588.
- Scott K. (2008) The economics of citizenship: Is there a naturalization effect? In: Bevelander P. and Devoretz D.J. (eds.) *The Economics of Citizenship*. Malmö: Holmbergs, 105-126.
- Steinhardt M.F. (2008) Does citizenship matter? The economic impact of naturalizations in Germany. *HWWI Research paper* 3-13 Hamburg: HWWI.
- VDAB (2004) Fatima of Sil, een wereld van verschil. Een vergelijkend onderzoek naar de slaagkansen op de arbeidsmarkt tussen etnisch E.U. en allochtone schoolverlaters. *ArbeidsmarktTopic* 2. Brussel: VDAB.
- Yang Q.P. (1994) Explaining Immigrant Naturalization. *International Migration Review* 28(3): 449-477.