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DO LEGAL REGULATIONS HINDER NATURALISATION?  
CITIZENSHIP POLICIES AND  
NATURALISATION RATES IN EUROPE

David Reichel



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*Do legal regulations hinder naturalisation?  
Citizenship policies and naturalisation rates in Europe*

**DAVID REICHEL**

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## **Abstract**

This paper investigates a simple relationship: the influence of citizenship regulations on citizenship acquisitions by comparing citizenship policies and naturalisation rates in European countries. The analysis looks at the statistical relationship on the cross-national level. As a quantitative indicator for citizenship policies, the MIPEX Nationality is used, including its different sub-indexes, which measure conditions for access to citizenship, eligibility criteria, security of status as well as regulations concerning dual nationality. The analysis includes a transparent discussion of the strengths and weaknesses of the approach taken in the paper. It can be shown that restricting access to citizenship indeed is related to lower naturalisation rates, and that restricted access to dual citizenship appears to have the most significant impact in EU-25 countries, Norway and Switzerland. However, the analysis shows that such a simple statistical comparison is prone to errors due to, amongst other things, the small number of observations for statistical analyses (i.e. countries), whereby outliers strongly influence the correlation.

## **Keywords**

Naturalisation Rates – Citizenship Policies – MIPEX – Nationality





## 1. Introduction\*

Whether or not a person applies for the citizenship of a country is a personal decision, which everyone who does not hold the citizenship of the country in which she or he is usually residing has to think about sooner or later. However, taking up the citizenship of the country of residence is not an entirely free choice, since access to citizenship is regulated and restricted by citizenship laws. This means that persons who wish to get naturalised might not be allowed to do so, because they do not meet the criteria stipulated in the laws. Conversely, persons who are eligible for naturalisation might simply not want to get naturalised for whatever reason.

The factors explaining naturalisations are manifold and can be summarised in three categories, namely: structural conditions in the country of residence, the situation in the country of origin of immigrants, and individual characteristics (cf. Waldrauch and Cinar 2003, Dronkers and Vink unpublished). Structural conditions include the naturalisation laws regulating access to citizenship in each country. In addition to these regulations, immigration laws are important too, since the added value or additional rights gained through naturalisation depend on the legal situation of non-citizens in a country. As the decisions about naturalisation applications can be subject to discretionary power of the authorities, the practices of authorities further influence the numbers of naturalisations. The general public discourse on naturalisation can have an influence on naturalisations as well by discouraging or encouraging applications for citizenship (e.g. through naturalisation campaigns). The situation in the country of origin is another important influence mainly due to the fact that immigrants and their descendents often maintain strong linkages to their country of origin and might plan to return one day. In this regard, the regulations allowing for maintaining rights in the country of origin as well as the costs for renouncing citizenship are relevant for persons who need to give up their previous citizenship in order to get naturalised. Apart from legal regulations in countries of origin, the economic and political situation there can also influence the decision to naturalise. Finally, individual characteristics of persons impact on their propensity to naturalise. Amongst others the socio-economic situation of potential naturalisation applicants, emotional attachments to the country of origin or the country of immigration as well as return plans are factors that influence the likelihood of a person to apply for naturalisation and get naturalised.

The three dimensions are strongly interrelated. If, for instance, the need to renounce citizenship is stipulated in the naturalisation laws, opportunities to maintain rights in the country of origin will be of greater importance if the person still plans to return to that country.<sup>1</sup> Consequently, legal regulations in the country of residence of immigrants are only one among many factors influencing naturalisation rates.

This paper seeks to investigate the influence of national naturalisation regulations on the number of citizenship acquisitions measured as the share of citizenship acquisitions of the total number of foreign citizens in a year. This share is commonly referred to as the naturalisation rate. The next section provides an overview of studies measuring the influence of legal regulations on naturalisation behaviour of immigrants. In the third section the methodology and data used in the paper are described. Firstly, the Access to Nationality index as part of the Migrant Integration Policy Index (from now on MIPEX Nationality), which is used as a quantitative measure for naturalisation regulations in European countries, will be described and comparatively analysed. Secondly, naturalisation rates in the European Union, Switzerland and Norway for the total foreign population and for non-EU citizens in 2007 and 2008 form the dependent variable. In the fourth section,

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\* I enormously benefitted from comments by Thomas Huddleston and Maarten Vink. Responsibility for any errors lies solely with the author.

<sup>1</sup> Cf. for the example of Turkish external policy affecting naturalisations in Austria: Cinar 2006.

naturalisation rates are set in relation to naturalisation regulations, as indicated by MIPEX Nationality, in order to analyse the impact of legal regulations on naturalisations. By employing regression analyses, the impact of MIPEX Nationality and its four sub-indexes on naturalisation rates will be explored for the EU-25 countries, Switzerland and Norway. Based on the results of the regression analyses, a prediction of changes in naturalisation rates based on changes in MIPEX scores in 2010 will be undertaken. Section five discusses potential drawbacks of the analysis as well as further approaches which are deemed (more) useful for measuring the impact of citizenship policies on citizenship acquisitions of immigrants. Section six concludes the paper by discussing the results.

## 2. Previous studies and hypothesis

I hypothesise that the stricter the legal regulations the lower the naturalisation rates in a country. This assumption is based on the obvious theoretical consideration that stricter conditions for naturalisation, such as higher income levels or language requirements, cannot be fulfilled by a higher share of the foreign population and therefore would exempt more persons from the opportunity to naturalise. All the same, persons might be able to fulfil certain conditions but not want to do so, as for instance a requirement to give up their previous citizenship or pay a certain amount for naturalisation. Furthermore, the assumption that stricter naturalisation regulations hinder naturalisation is supported by previous research results, although the studies exclusively dealing with the influence of naturalisation policies on numbers of naturalisations are scarce. Thomas Janoski, for instance, clearly shows that the higher the barriers for naturalisation in a country, indicated by regulations concerning the naturalisation process and *ius soli* regulations, have a negative influence on naturalisation rates in 18 countries (Janoski 2010). Using data from the European Social Survey (ESS), Jaap Dronkers and Maarten Vink (unpublished) find that the higher the MIPEX Nationality the higher the likelihood that a first or second generation immigrant has naturalised. The multi-level analysis in this study, which considers the effects of individual characteristics, country of origin effects as well as country of residence structures, shows that, all other factors being constant, an increase in the MIPEX by ten points increases the likelihood of a person having the citizenship of the country of residence (thus being naturalised) by 13 percent (Dronkers and Vink unpublished). Though not employing such a detailed analysis in terms of citizenship acquisition, Aleksynska and Algan (2010) do not find such a relationship despite using similar data sources. In a detailed analysis of determinants of naturalisation in Spain, Amparo Gonzalez-Ferrer and Clara Cortina Trilla (2011) demonstrate that the different naturalisation regulations for EU citizens, privileged third-country nationals and non-privileged third-country nationals have a clear impact on the naturalisation behaviour of those three groups.<sup>2</sup>

One previous comparison of the average naturalisation rates from 2002 to 2007 in the EU-15 and the MIPEX Nationality 2007 did not reveal a strong statistical relationship, which can be explained by the weakness of naturalisation rates based on the total number of citizenship acquisitions as an indicator for naturalisations (Reichel 2010a). However, the low relationship is also explained by the use of average rates for the years 2002 to 2007, which do not take into account the changes in the naturalisation laws during this period (e.g. in Portugal and Austria in 2006). In a recent publication of Eurostat statistics on acquisitions of citizenship in the EU in 2009, Fabio Sartori (2011: 4-5) compares the naturalisation rates in the EU-25 to the MIPEX Nationality 2010. He finds a positive correlation between the two indicators with a linear correlation coefficient of about 0.5, which is, as the author puts it, *weaker than one might expect*.

In addition to the general influence of legal regulations, the question of which regulations have more or less influence on naturalisation behaviour is of interest. Research on motivations for naturalisation indicates that the required renunciation of previous citizenship, income requirements

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<sup>2</sup> In Spain non-nationals born in Latin-American countries as well as in Andorra, the Philippines and Portugal can access Spanish citizenship easier than third-country nationals from other countries (cf. Gonzalez-Ferrer and Cortina Trilla 2011).

and costs of naturalisation are the major factors that prevent persons from acquiring national citizenship. Although there is no comprehensive quantitative study on the reasons preventing naturalisation, a small scale survey among naturalisation applicants in the city of Vienna suggests that renunciation of citizenship is seen as the main reason against naturalisation (Reichel 2011: 101-130). The unwillingness to renounce citizenship is mentioned repeatedly in qualitative studies with immigrants in Austria and Germany as well (e.g. Latcheva et al. 2006; Wunderlich 2005). Prohibition or toleration of dual citizenship is also an important country of origin effect, since both countries have to allow dual citizenship. However, there is no concrete evidence that these regulations have an influence on the likelihood of persons to naturalise (cf. Dronkers and Vink unpublished; Gonzalez-Ferrer and Cortina Trilla 2011).

For these reasons, I assume to find a modest statistical relationship between legal regulations and naturalisations. My first hypothesis is that the easier access to citizenship (i.e. the higher the MIPEX score), the higher the naturalisation rate in a country. I furthermore hypothesise that dual citizenship regulations have the strongest influence on the naturalisation rates in a country, whereby I assume that the prohibition of dual citizenship significantly hampers naturalisation.

### **3. Methodology, data and descriptive statistics**

The approach taken in this paper is to statistically compare a quantitative indicator for naturalisation policy to an indicator for naturalisation behaviour on the national level in the EU-25, Norway and Switzerland. The indicator for naturalisation policy is the access to nationality strand of the Migrant Integration Policy Index (MIPEX), which serves as the independent variable. The dependent variable is the naturalisation rate in a country. In the remainder of this section I describe these two indicators, which are subsequently, in the following section, used for a regression analysis. The statistical relationship is examined by using an Ordinary Least Squares Regression, which estimates the statistical influence of the MIPEX on the naturalisation rates. In a second model, the sub-indexes of the MIPEX Nationality are used in order to examine the strength of the influence of different types of regulations.

#### ***3.1 Naturalisation regulations measured through the MIPEX***

Non-citizens have to meet several criteria in order to be eligible for naturalisation. First of all, a number of different types of citizenship acquisitions or naturalisations can be distinguished, with naturalisation being defined as *any mode of [citizenship] acquisition after birth of a nationality not previously held by the target person that requires an application by this person or his or her legal agent as well as an act of granting nationality by a public authority* (EUDO 2008).<sup>3</sup> A comprehensive typology of naturalisation modes has been elaborated by Harald Waldrauch (2006). Concerning citizenship acquisitions after birth, the following five general types or clusters can be distinguished: (1) birthright-based modes of acquisition of citizenship after birth; (2) basic residence-based modes; (3) family relation-based modes; (4) affinity-based modes; and (5) other targeted modes of citizenship acquisition (cf. Waldrauch 2006: 108-111). The most recent comparative analysis of legal regulations of the different modes of citizenship acquisitions and types of naturalisation was published by Sara Wallace Goodman (2010), in which she comparatively analysed the policies of residence-based naturalisations as well as of other modes of naturalisation<sup>4</sup>. The criteria important for residence-based modes of citizenship acquisition include regulations concerning the length of residence, renunciation

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<sup>3</sup> In this paper I use the terms nationality and citizenship interchangeably, defined as the legal bond between an individual and a nation state.

<sup>4</sup> Other modes of citizenship acquisition include socialisation-based acquisitions, spousal transfer and extension of naturalisation, filial transfer and extension of naturalisation as well as regulations targeting recognised refugees and stateless persons.

of former citizenship, criminal records, 'good character', financial and health requirements, language, country knowledge, value and integration requirements as well as procedural conditions for naturalisation, including administrative fees to be paid for naturalisation.

In addition to such comprehensive comparative legal analyses, several attempts have been made to quantify citizenship policies and regulations through an index, in order to allow for quantitative country comparisons of citizenship regulations and a categorisation of each country as more or less liberal and restrictive. Amongst others, such indexes have been published and utilised by Marc Morjé Howard (2009) with his CPI Index, Thomas Janoski (2010) with his Barrier to Naturalisation Index as well as the Migration Policy Group and the British Council (Geddes et al. 2005, Niessen et al. 2007, Huddleston et al. 2011) with the MIPEX. For the purpose of this paper I will use the Access to Nationality index, which is part of the Migrant Integration Policy Index (MIPEX). The MIPEX was chosen for practical reasons due to its easy availability and transparent description. The index is easy to use for secondary analysis and the indicators can be changed or re-calculated for one's own purposes. According to Marc Helbling's (2010) online statement on the usefulness of indicators for comparing citizenship policies, the different indicators elaborated to quantitatively capture citizenship policies are highly correlated, which justifies my pragmatic approach to using the MIPEX. This index will be briefly described in the remainder of this section.

The MIPEX was first elaborated in 2005 for the EU-15 countries (Geddes et al. 2005) and refined and elaborated for the EU-25 as well as Canada, Norway and Switzerland in 2007 (Niessen et al. 2007). The third edition of the MIPEX (Huddleston et al. 2011) covers the EU-27 countries, Canada, Norway, Switzerland and the USA and consists of 148 indicators, which together build seven strands of policy areas. Access to nationality is one of these seven policy areas<sup>5</sup> and consists of 32 indicators, which are clustered in the four sub-domains: (1) eligibility, (2) conditions for acquisition, (3) security of status, and (4) dual nationality. Eligibility is comprised of indicators for residence requirements for first generation immigrants and periods of absence allowed as well as residence requirements applicable to spouses of nationals, partners and cohabitantes of nationals and 'second and third generation' immigrants. The conditions for acquisition are described by regulations concerning knowledge of the language and 'integration' requirements (i.e. general requirements, exemptions, costs, support, conductor and assessment), economic resource requirements, criminal record requirements, 'good character clauses', maximum length of application procedure and costs of application and issuance of nationality title. The sub-index security of status for 'ordinary' third-country nationals consists of the indicators of additional grounds for refusing status (e.g. fraud or threat to the public policy or national security), discretionary powers in refusal, several issues that are taken into account before refusal (e.g. personal behaviour of applicant), legal guarantees and redress in case of refusal, grounds for withdrawing status, time limits for withdrawal and withdrawal that would lead to statelessness. Finally, the fourth sub-index, dual nationality, is based on two indicators consisting of the requirement to renounce or lose previous nationality upon naturalisation for immigrants and regulations for dual nationality for 'second and third generation' immigrants.<sup>6</sup>

For all indicators three options are available which measure the openness or 'closedness' of access to nationality for non-nationals. If the first option is chosen, the country scores 100 at this indicator, which stands for full access and absence of restrictions. The second option scores 50 and the third option, which is considered the most restrictive case, scores 0. For instance, if a country fully allows dual nationality for immigrants it scores 100 at this indicator. If renunciation of citizenship is required but with exemptions in certain cases, a country scores 50. If the requirement of renunciation exists without any exemptions, the country scores 0. The sub-indexes are calculated as the mean value of all

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<sup>5</sup> The other areas are labour market mobility, family reunion for third-country nationals, education (which was newly introduced in 2010), political participation, long-term residence and anti-discrimination.

<sup>6</sup> Cf. MIPEX Raw Data, available at the website [www.mipex.eu](http://www.mipex.eu) (accessed March 2011); an overview list of indicators is also found in Huddleston et al. (2011: 212-213).

of its indicators and the total index is the mean value of all four sub-indexes. It is important to note that the index only refers to regulations relevant for third-country nationals.

Undoubtedly, the functioning of the index is strongly based on the decisions taken for the categorisation of the different indicators as well as the selection of each indicator, which are all equally weighted. This means that no indicator has more weight or importance than another, in spite of potentially being of different importance to possible naturalisation applicants. The importance of the different sub-domains of the MIPEX Nationality for fostering or preventing naturalisation will, amongst other issues, be assessed in this paper by looking at the influence of the different sub-indexes on the naturalisation rates.

Table 1 shows the results of the MIPEX Nationality as well as its sub-indexes in 2007 and 2010. In 2010, the countries with the highest scores at the MIPEX Nationality are Portugal and Sweden, scoring 82 and 79.3 points, respectively, and, significantly lower, Belgium in the third place with a score of 68.6 points. The lowest scores are reported for the Baltic countries with scores of 15.4 for Latvia, 15.5 for Estonia and 19.8 for Lithuania. The Baltic countries are closely followed by Austria at 21.6, which is by far the lowest scoring country of the EU-15 countries. In 2007, the highest scoring countries were again Portugal and Sweden, in first and second place, and the United Kingdom in third. The UK's score sharply dropped from 2007 to 2010, from 75.2 points to 59.3 points, already reflecting the Borders, Citizenship and Immigration Act from 2009, which is expected to come into force in 2011 (Huddleston et al. 2011: 201,205). Amongst the lowest scoring countries in 2007 were the Baltic countries with similar scores compared to 2010, but with Greece coming in between Estonia and Lithuania. After the changes to the Greek citizenship law in 2010, access to citizenship was liberalised and Greece climbed up in the MIPEX Nationality ranking (Huddleston et al. 2011: 93, 96). However, in 2011, the constitutionality of the new Greek nationality law was questioned by the fourth Chamber of the State Council.<sup>7</sup>

Countries of the EU-15 score significantly higher than the EU-10<sup>8</sup> countries, with an average score that is more than double. Looking at the four sub-indexes, a number of countries catch one's eye as being special cases. Firstly, there are several countries with high scores for eligibility criteria but low scores for conditions for access to nationality, such as Ireland, France and the United Kingdom. On the contrary, countries such as the Baltic countries, Slovenia, the Czech Republic, Poland, Norway and Hungary show higher scores for conditions for citizenship acquisition compared to the scores for eligibility criteria. Secondly, certain countries show clear differences in their scores for the security of status and the conditions for acquisition. In particular, Spain and Switzerland show high security of status scores but lower scores when it comes to conditions for citizenship acquisition. Conversely, Lithuania shows an above average score on the index for conditions for acquisition but a very low score for the security of status sub-index.

Looking at the sub-index for the regulations of dual nationality, which is built from only two indicators, the countries can be categorised into four clusters.<sup>9</sup> Nine countries allow full access to dual nationality for immigrants and their descendents, all of them of the 'old' EU-15 countries. Only two countries, Estonia and Lithuania, completely forbid dual nationality.

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<sup>7</sup> Christopoulos Dimitris (2011).

<sup>8</sup> EU-10 countries are all countries that acceded to the European Union in 2004. EU-2 countries (i.e. Bulgaria and Romania) were not included in the MIPEX II.

<sup>9</sup> These clusters will be described more in detail in Section 4.2 when comparing the results of the MIPEX Nationality with naturalisation rates.

Comparing the results of the index for 2007 to those for 2010, a few trends are observable. The overall average score<sup>10</sup> was 42.9 in 2007, which increased by not even five percent to 44.9 in 2010. Distinguishing between EU-15 and EU-10 countries, it becomes clear that the average score only increased in the EU-15, by almost eight percent to 57.8, while the average total score for the EU-10 countries decreased slightly to 26.7. This increase in the EU-15 is due primarily to the improvements in MIPEX Nationality by Greece and Luxembourg. Looking at the EU-15 countries only, among the four sub-indexes, the average score of the dual nationality index increased strongly. The security of status and eligibility criteria sub-indexes slightly increased, while the index for conditions of access to nationality dropped by one point in the EU-15. In the EU-10 countries the security of status and conditions for acquisition declined somewhat, and the other two sub-areas remained stable. These very recent trends partly reflect the trends of citizenship policies that have been found in more detailed studies of naturalisation policies (Waldrauch 2006, Vink and de Groot 2010, Goodman 2010), highlighting an increased acceptance of multiple citizenship as well as the introduction and higher demands of language and ‘integration’ tests. The latter trend is reflected in the slightly decreasing sub-indicator of conditions of acquisition of nationality.

Finally, there is the question of whether the citizenship policies converge or diverge across European countries. The MIPEX allows for indicating such a development by looking at the differences in the standard deviations of the average scores. For all 27 countries in Table 1, the average deviation from the mean value barely decreased. However, when distinguishing between EU-15 and EU-10 countries it is clearly observable that the ‘old’ EU Member States moved together, as shown by the lower variation of the index scores in 2010 in comparison to 2007. This lower variation is true for all sub-indexes in the EU-15. The variation in the EU-10 countries has not changed remarkably.

### **3.2 Naturalisations rates**

For the purpose of interregional and international comparison as well as comparison over time, the use of raw naturalisation numbers is not very helpful, as the number of naturalisations is strongly influenced by the number of non-nationals residing in a region or country. This is why naturalisation rates are usually employed for comparative purposes, which put the number of naturalisations in relation to the total number of foreign residents.

Naturalisation rates are defined as the number of naturalisations during a given year as the percentage of the total number of foreign citizens residing in the same geographical entity in the same year (at the beginning of the year). Naturalisation rates thus indicate how many persons out of all potential naturalisation candidates actually do naturalise. It is, however, argued that this interpretation might be misleading, since not all foreign residents are eligible for naturalisation, most notably due to the required length of residence, which excludes newly arrived immigrants (see also discussion below).

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<sup>10</sup> Calculated as the mean of all overall scores and not as the mean of the average sub-indexes. This average value has been chosen in order to allow for calculating the standard deviation of the mean of all scores, which provides information on the variation of the scores among the countries.

**Table 1: MIPEX Nationality scores, averages and standard deviations in EU-25 countries, Norway and Switzerland in 2007 and 2010**

	2010					2007				
	total	elig	cond	sec	dual	total	elig	cond	sec	dual
PT	82.0	90	80.7	57.1	100	82.0	90	80.7	57.1	100
SE	79.3	60	71.4	85.7	100	79.3	60	71.4	85.7	100
BE	68.6	60	71.4	42.9	100	68.6	60	71.4	42.9	100
LU	66.4	40	68.3	57.1	100	34.3	40	82.9	14.3	0
NL	65.6	75	48.1	64.3	75	65.1	75	46.2	64.3	75
IT	62.9	30	50.0	71.4	100	64.6	30	57.1	71.4	100
UK	59.3	65	29.5	42.9	100	75.2	100	58.1	42.9	100
DE	59.2	90	32.6	64.3	50	52.0	90	18.1	50.0	50
FR	59.0	75	25.2	35.7	100	59.0	75	25.2	35.7	100
IE	58.2	90	28.6	14.3	100	60.0	90	35.7	14.3	100
FI	56.8	65	47.9	64.3	50	54.3	55	47.9	64.3	50
GR	56.8	75	45.0	7.1	100	18.3	5	18.1	0.0	50
ES	38.6	40	25.2	64.3	25	38.6	40	25.2	64.3	25
DK	33.1	40	24.5	42.9	25	33.1	40	24.5	42.9	25
AT	21.6	20	27.1	14.3	25	21.6	20	27.1	14.3	25
PL	35.0	15	57.1	42.9	25	35.0	15	57.1	42.9	25
CZ	33.4	0	51.4	57.1	25	33.4	0	51.4	57.1	25
SI	32.7	10	67.1	28.6	25	32.7	10	67.1	28.6	25
CY	32.0	35	35.7	7.1	50	32.0	35	35.7	7.1	50
HU	31.4	0	40.0	35.7	50	27.9	0	40.0	21.4	50
SK	26.7	10	25.2	21.4	50	38.6	10	44.3	50.0	50
MT	25.5	15	30.0	7.1	50	25.5	15	30.0	7.1	50
LT	19.8	20	52.1	7.1	0	19.8	20	52.1	7.1	0
EE	15.5	10	30.7	21.4	0	15.2	10	29.5	21.4	0
LV	15.4	0	36.7	0.0	25	15.9	0	38.6	0.0	25
NO	40.7	20	67.9	50.0	25	40.7	20	67.9	50.0	25
CH	35.5	35	0.0	57.1	50	35.5	35	0.0	57.1	50
	<b>Average Value<sup>11</sup></b>									
Total	44.9	40.2	43.3	39.4	56.5	42.9	38.5	44.6	37.6	50.9
EU25	45.4	41.2	44.1	38.3	58.0	43.3	39.4	45.4	36.3	52.0
EU15	57.8	61.0	45.0	48.6	76.7	53.7	58.0	46.0	44.3	66.7
EU10	26.7	11.5	42.6	22.9	30.0	27.6	11.5	44.6	24.3	30.0
	<b>Standard Deviation</b>									
Total	19.6	30.0	19.3	23.9	35.1	20.1	31.5	20.9	24.1	34.3
EU25	20.3	30.9	17.3	24.5	35.9	20.9	32.6	19.2	24.7	35.3
EU15	16.1	22.5	19.7	22.9	32.0	20.3	28.6	23.1	24.8	36.2
EU10	7.5	10.8	13.6	18.4	19.7	8.2	10.8	12.2	20.0	19.7

Legend: elig = eligibility, cond = conditions for acquisition, sec = security of status, dual = dual nationality. Source: www.mipex.eu (March 2011), Huddleston et al. 2011 and own calculations.

<sup>11</sup> It is important to note that the average total value is not equal to the total value that is calculated as the mean of the average value of the four sub-indicators, as it has been done for the official MIPEX publication. For statistical purposes, I chose to use the average score of the total values. See footnote 11.

Table 2 shows the naturalisation rates for 2007 and 2008 in the EU-25 countries, Norway and Switzerland as well as the weighted naturalisation rate<sup>12</sup> of all EU-27 countries. Additionally, the naturalisation rate for third-country nationals (i.e. non-EU citizens including stateless persons) was included in the third column. The rates were calculated using data on citizenship acquisitions from Eurostat, defining citizenship acquisitions as *grants of citizenship awarded by the reporting country to persons who were previously citizens of another country or stateless*.<sup>13</sup> The foreign population is defined as the *usually resident population* without the citizenship of the country of residence as recorded on 1 January of the reference year.<sup>14</sup>

In 2007, the naturalisation rates in the EU-25 countries, Switzerland and Norway ranged from 0.44 in Greece to 6.84 in Sweden. In 2008, the lowest naturalisation rate is found in the Czech Republic, which stood at 0.35 and the highest rate again in Sweden at 5.81. In 2007, the (unweighted) mean value was 2.9 with a standard deviation of 1.8. In 2008, the (unweighted) mean was lower at 2.57 with a slightly smaller standard deviation of 1.6. 18 countries show a lower naturalisation rate in 2008 compared to 2007, which confirms the clear downward trend indicated by the decreased mean value. The naturalisation rates for third-country nationals in 2008 are much more diverse than the total rates. The lowest rate is found in the Czech Republic (0.42) and the highest rates are found in Belgium (8.36) and in Sweden (7.92). The Belgian rate was, however, only available for 2009. The (unweighted) mean of the naturalisation rates for third-country nationals is 3.63 and therefore considerably higher than the naturalisation rate of the total foreign population. This indicates a lower propensity to naturalise by EU citizens. A first comparison of the naturalisation rates and the MIPEX Nationality scores already suggests that countries scoring high at the MIPEX also show comparably higher naturalisation rates (e.g. Portugal or Sweden) and conversely, countries with lower MIPEX scores show lower naturalisation rates (e.g. Czech Republic, Lithuania). The following section explores the statistical relationship between the two indicators.

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<sup>12</sup> Weighted rate means that the total numbers of citizenship acquisitions and of the foreign population are used. The unweighted average would be the average of the rates of all countries, where a country with more citizens does not have more weight than a country with lower numbers.

<sup>13</sup> Eurostat (2010): Acquisition and Loss of Citizenship. Reference Metadata in Euro SDMX Metadata Structure. Last update 12 April 2010. [http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/EN/migr\\_acqn\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/migr_acqn_esms.htm).

<sup>14</sup> Cf. Eurostat (2010): Population by citizenship and by country of birth. Reference Metadata in Euro SDMX Metadata Structure (ESMS). Last update 12 April 2010.

[http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/EN/migr\\_stock\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/migr_stock_esms.htm). *Usual residence* is defined as *the place at which a person normally spends the daily period of rest, regardless of temporary absences for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimage or, in default, the place of legal or registered residence* (cf. EC Regulation 862/2007) and is often indicated by an actual or expected length of residence of 12 months.



**Table 2: Naturalisation rates in the EU25, Norway and Switzerland in 2007 and 2008<sup>15</sup>**

	2007	2008	TCN 2008		2007	2008	TCN 2008
SE	6.84	5.81	7.92	EU27	2.45	2.26	n.a.
NO	6.24	3.87	7.28	CY	2.35	2.76	3.39
PT*	5.15	5.02	6.67	LV	1.92	1.02	1.04
HU	5.03	4.59	3.00	EE	1.79	0.93	0.96
SK	4.60	1.17	2.21	AT	1.74	1.23	1.72
UK	4.50	3.21	5.21	ES	1.56	1.60	2.63
NL	4.50	4.10	4.25	DE	1.56	1.30	1.68
MT	3.99	4.17	6.30	IT	1.55	1.56	1.89
FI	3.96	5.04	6.84	DK	1.31	2.02	2.76
BE*	3.87	3.71	8.36	IE	1.03	0.59	1.88
FR	3.62	3.74	5.02	LT	0.93	0.72	0.77
SI	2.90	2.46	2.40	CZ	0.80	0.35	0.42
CH	2.82	2.77	4.81	LU	0.62	0.59	1.84
PL	2.81	3.12	4.90	GR	0.44	1.87	1.86

Source: Own calculation with data from Eurostat database: table migr\_acq and table migr\_pop (data extracted on 12 April 2011 and 21 June 2011).

\* For Belgium the total number of citizenship acquisitions in 2008 was taken from 2007 and for third-country nationals the rate for 2009 was used. For Portugal the number of citizenship acquisitions for 2007 was taken from 2008.

#### 4. Explaining naturalisation rates with the MIPEX

The following models regress the total naturalisation rate on the MIPEX Nationality score for 2007. One regression was estimated for each year of 2007 and 2008 (Models 1 and 2). Furthermore, a regression was run for the naturalisation rates of third-country nationals in 2008 and a fourth model for the rates of (former) Turkish citizens in 2008. Two models were calculated for each of the four regressions. The first model includes the total MIPEX Nationality score as the only explaining variable (bivariate models) and the second model explains naturalisation rates with the different sub-indexes of the MIPEX Nationality (extended models). For these models the sub-index on security of status was newly calculated. Three indicators measuring the security of retaining citizenship after naturalisation (i.e. rules for withdrawal of citizenship) were taken out, since these indicators do not influence the likelihood of persons to acquire citizenship. The countries included in the analysis are the EU-25 countries as well as Norway and Switzerland.<sup>16</sup> In the fourth regression, the analysis was limited to 12 countries.<sup>17</sup> The results of the regressions are found in Table 3 and the bivariate regressions for the three different rates in 2008 are graphically shown in Figure 1.

<sup>15</sup> The naturalisation rates are calculated as the number of citizenship acquisitions during the year for every 100 foreign-nationals residing in the country at the beginning of the year. The naturalisation rates of third-country nationals was calculated as the number of acquisitions of citizenship by non-EU citizens during 2008 as the percentage of the number of third-country nationals residing in the country at the beginning of the year 2008.

<sup>16</sup> Bulgaria and Romania were excluded due partly to unavailability of data but mainly because they can be considered as extreme outliers and exceptional cases compared to the other countries included in the analysis, as both countries show extremely high naturalisation rates in 2008 (Bulgaria 29.3 and Romania 21.4).

<sup>17</sup> This was done in order to include only countries with a considerable number of Turkish citizens (i.e. at least 1,000) and due to unavailability of data.

**Table 3: Influence of MIPEX scores on naturalisation rates in 2007 and 2008 (OLS Regression)**

	Dependent variables							
	Naturalisation rate 2007		Naturalisation rate 2008		Naturalisation rate 2008 TCNs*		Naturalisation rate 2008 Turks	
	Model 1.1	Model 1.2	Model 2.1	Model 2.2	Model 3.1	Model 3.2	Model 4.1	Model 4.2
MIPEX 2007	0.046 (0.015)	-	0.042 (0.014)	-	0.07 (0.019)	-	0.12 (0.042)	-
Eligibility	-	-0.019 (0.014)	-	-0.010 (0.013)	-	-0.004 (0.018)	-	0.015 (0.038)
Conditions	-	0.024 (0.014)	-	0.013 (0.014)	-	0.027 (0.019)	-	0.078 (0.046)
Security	-	0.025 (0.013)	-	0.016 (0.013)	-	0.024 (0.018)	-	0.032 (0.039)
Dual nationality	-	0.030 (0.012)	-	0.027 (0.011)	-	0.034 (0.016)	-	0.017 (0.038)
Constant	0.939 (0.72)	0.244 (0.80)	0.780 (0.64)	0.524 (0.76)	0.597 (0.89)	0.092 (1.08)	-1.671 (2.18)	-2.425 (2.5)
R-Squared (adj.)	0.268 (0.238)	0.408 (0.300)	0.277 (0.248)	0.341 (0.221)	0.36 (0.334)	0.401 (0.292)	0.434 (0.377)	0.574 (0.330)
N	27 (=EU25+NO+CH)		27 (=EU25+NO+CH)		27 (=EU25+NO+CH)		12 (=BE, DK, DE, ES, IT, HU, NL, AT, FI, SE, NO, CH)	

Notes: Standard errors in parenthesis.

\* For Belgium the TCN rate 2009 was used, due to unavailability of data for 2008.

#### 4.1 Bivariate models

In all four bivariate models, the MIPEX has a significant influence on the naturalisation rate.<sup>18</sup> The MIPEX score explains between 26.8 (Model 1.1) and 43.4 percent (Model 3.1) of the total variance in the naturalisation rates. If the MIPEX would score zero, an average naturalisation rate of 0.94 would be estimated in 2007, as indicated by the constant of the model. With an increase of the MIPEX by one point, the average naturalisation rate is expected to increase by 0.046. This means that the expected average naturalisation rate is 5.5 in 2007, if the MIPEX takes its full score of 100.<sup>19</sup> The explanatory power of the MIPEX is slightly stronger in 2008, where a generally lower average rate is predicted for (the fictive situation of) zero-scoring countries (0.78). The influence of the MIPEX is about the same in 2008, with a coefficient of 0.042 for a one point increase in the MIPEX, leading to a maximum prediction of the naturalisation rates of 4.98.

The model for the estimated naturalisation rate of third-country nationals only has a stronger predictive power. The difference can be explained by the better applicability of the MIPEX to third-country nationals and the different meaning of naturalisation in the EU for non-EU citizens, as non-EU citizens gain more additional rights through naturalisation in the EU, or more precisely, they also acquire European Union citizenship.

<sup>18</sup> I do not consider statistical significance as the key information on an existing relationship, because this is not a random sample of countries. Significance does indicate the likelihood that a certain influence can be found in the total population, when taking the information from a random sample. The relationships found in the models are de facto strengths of relationships in the countries, indicated by the coefficients and their standard errors. In the bivariate models the influence of the MIPEX is significant at a level lower than 0.001, except for the fourth model where the significance level is below 0.01.

<sup>19</sup> This average rate is calculated by taking the constant and adding the coefficient of the MIPEX times 100:  $0.939 + 0.046 \cdot 100$ .

The MIPEX explains more than one third (36%) of the variance of the naturalisation rates of third-country nationals, which means that these two indicators are strongly correlated ( $r=0.6$ ). The predicted average naturalisation rate of third-country nationals in the 27 countries is lower than the predicted rates for all non-citizens in 2007 and 2008. However, the strong influence of the MIPEX (0.07), predicts that the highest possible naturalisation rate of third-country nationals is much higher than the rates of all non-citizens. In case of a MIPEX score of 0, an average naturalisation rate of 0.6 is expected. If the MIPEX reaches its full 100, a rate of 7.6 is predicted. This shows a clear influence of the citizenship regulations on third-country nationals' propensities and opportunities to naturalise.

Finally, a fourth regression for (former) Turkish citizens was estimated. This model was included in order to be able to look at the influence of the MIPEX on a particular group of immigrants and therefore partly neutralise country of origin effects. Although only 12 countries were included in the regression, the MIPEX shows the strongest effect on naturalisation rates of (former) Turkish citizens compared to the other models. The model even estimates a negative naturalisation rate in the fictive situation of zero-scoring countries. In the twelve countries of observation, an increase in the MIPEX score by 10 points leads to a predicted increase in the average naturalisation rate of 1.2.

Figure 1 shows the plots of the MIPEX scores against the naturalisation rates in 2008. In these figures the countries that do not fit into the predictive model are thus deviating from the relationship that can be identified. In 2008, the naturalisation rates in Hungary, Malta, Finland, Sweden and Norway are higher than expected based on the MIPEX score. On the other hand, Italy, the Czech Republic, Germany and Luxembourg show lower naturalisation rates as compared to other countries with similar MIPEX scores. Looking at the plot of naturalisation rates including third-country nationals only, Malta, Norway and Belgium, as well as to a lower extent Finland, Poland, Sweden and Switzerland positively deviate from the predicted mean scores. Italy, Ireland, Germany and the Czech Republic show lower rates than would be expected on the basis of the MIPEX. Similarly, the naturalisation rates for Turkish nationals are above average in Norway and Sweden and below average in Italy, Germany and the Netherlands. The deviations from the predicted means (i.e. the regression line) can be explained by several factors which are not captured by the MIPEX and the naturalisation rates, including different compositions of the foreign population having differing naturalisation behaviour or propensities to naturalise and, most notably, discretionary naturalisation practices in certain countries. Countries that have discretionary power in implementing the naturalisation procedure can thus decide to take a more liberal or a more restrictive approach.<sup>20</sup>

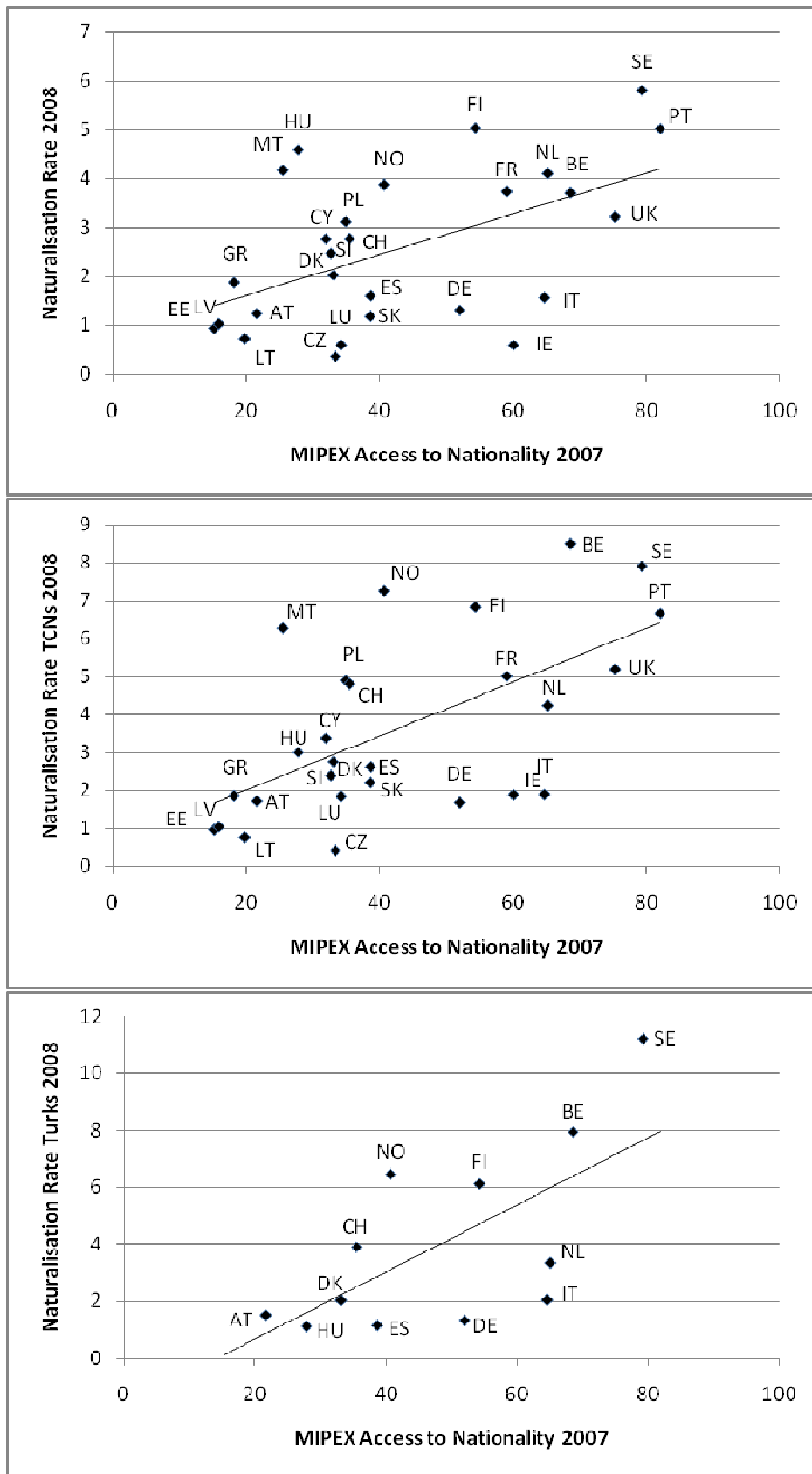
#### **4.2 Extended models**

Given the fact that the MIPEX score has an influence on the naturalisation rates, the question on which regulations mainly influence the naturalisation rates is of peculiar interest. Previous research suggests a major influence of dual citizenship regulations on citizenship acquisitions, since persons usually do not want to give up their original citizenship. This hypothesis is only partly confirmed in the models (Table 3). First of all, it has to be stated that the predictive power of the MIPEX has increased by using the different sub-indexes instead of the total MIPEX score. The sub-indexes explain between a third (model 2.2) and more than a half (model 4.2) of the variance of the naturalisation rates, which are higher  $R^2$ -values than for the bivariate models. Again, the rates of third-country nationals and those of Turks can be better explained than the total rates.

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<sup>20</sup> For instance, in Austria, the city of Vienna took a more liberal approach toward naturalisation in the 1990s and the beginning of the 2000s until the discretionary power was reduced by an amendment to the citizenship laws (cf. Waldrach/ Cinar 2003; Reichel 2011, 62-68, 153-156).

Figure 1: Plots of MIPEX 2007 against Naturalisations Rates in 2008



Source: Own presentation based on data from Eurostat (see Table 1 and Table2).

In the first two models estimating the general naturalisation rates, the sub-index on dual citizenship has the strongest influence (0.03 and 0.027, respectively). In addition, the coefficients for the dual nationality sub-index show the lowest standard errors. The sub-indexes measuring the security of status and the conditions of acquisition as well as eligibility criteria show similar coefficients in the first two regressions, although the influence is much weaker on the 2008 rates. Thus, the rates of 2007 can be explained much better by the MIPEX 2007 than the rates of 2008. In the third model for non-EU citizens, dual citizenship has the strongest influence, also having the smallest standard error. However, the coefficients of the sub-indexes for conditions of acquisition and security of status are not much smaller. Eligibility criteria do not have an impact on the rates of third-country nationals in 2008. Finally, looking at the model for Turks (model 4.2), the importance of dual citizenship regulations is much lower and the conditions of acquisition appear to have the strongest influence. This might be due to the fact that since 1995, former Turkish citizens can retain important rights in Turkey even after renouncing their citizenship (cf. Cinar 2006). It has to be noted that the standard errors of the coefficients are large in Model 4.2 and the statistical power of the third model is highly questionable.

The results reveal that the required length of residence, which is mainly indicated by eligibility criteria, does not influence the propensity of persons to naturalise but might just delay citizenship acquisition.

Since the MIPEX sub-index Dual Citizenship is based on only two indicators (dual citizenship for first and for second and third generation immigrants), there are four possible scores. Zero for countries that do not allow any dual nationality, 25 for countries that allow limited dual citizenship either for first or for second and third generation, and so on. Table 4 shows the different clusters of the sub-index scores and the related average naturalisation rates. This presentation illustrates that countries with more open access to dual nationality have higher average naturalisation rates. The average rates in Estonia, Lithuania and Luxembourg were 1.1 in 2007 and 0.75 in 2008, and the average rates for third-country nationals was 1.2 in 2008. Since 2007, Luxembourg has lifted these restrictions and now scores 100 at the dual nationality sub-index. Countries scoring 25 show average rates between 1.96 and 2.89 and countries scoring 50 show rates between 2.96 and 3.76 on average. The Netherlands, where renunciation of previous citizenship is required for first generation immigrants with exceptions, is the only country that scores 75. The rates in the Netherlands range from 4.1 to 4.5. The seven countries that did not restrict dual nationality in 2007 had average naturalisation scores between 3.38 and 5.28. Consequently, this comparison further indicates the influence of dual citizenship regulations, as countries with fewer restrictions tend to show higher naturalisation rates. When comparing the countries in the different clusters, it is notable that two countries have lifted their restrictions in 2010 compared to 2007 (LU and GR). In those countries higher naturalisation rates are thus expected. Changes in naturalisation rates due to changes in the laws as well as prediction of naturalisation rates based on legal regulations will be discussed in the next section.

**Table 4: MIPEX Dual Nationality and Average Naturalisation Rates**

	Score MIPEX Nationality sub-index Dual Nationality				
	0	25	50	75	100
Countries 2007	EE, LT, LU	AT, CZ, DK, ES, LV, NO, PL, SI	CH, CY, DE, FI, GR, HU, MT, SK	NL	BE, FR, IE, IT, PT, SE, UK
Aver. Rates 2007	1.12	2.41	3.09	4.5	3.79
Aver. Rates 2008	0.75	1.96	2.96	4.1	3.38
Aver. TCN Rates 2008	1.19	2.89	3.76	4.25	5.28
Countries 2010	EE, LT	AT, CZ, DK, ES, LV, NO, PL, SI	CH, CY, DE, FI, HU, MT, SK	NL	BE, FR, GR, IE, IT, LU, PT, SE, UK

### **4.3 Changes in naturalisation rates over time and prediction of changes**

Given the influence of naturalisation regulations on naturalisation rates, changes in citizenship laws potentially change naturalisation rates. It is important to note again that legal regulations are not the only factors influencing naturalisation rates, as immigration legislation, country of origin factors and individual characteristics also contribute to the opportunities and decisions to naturalise.

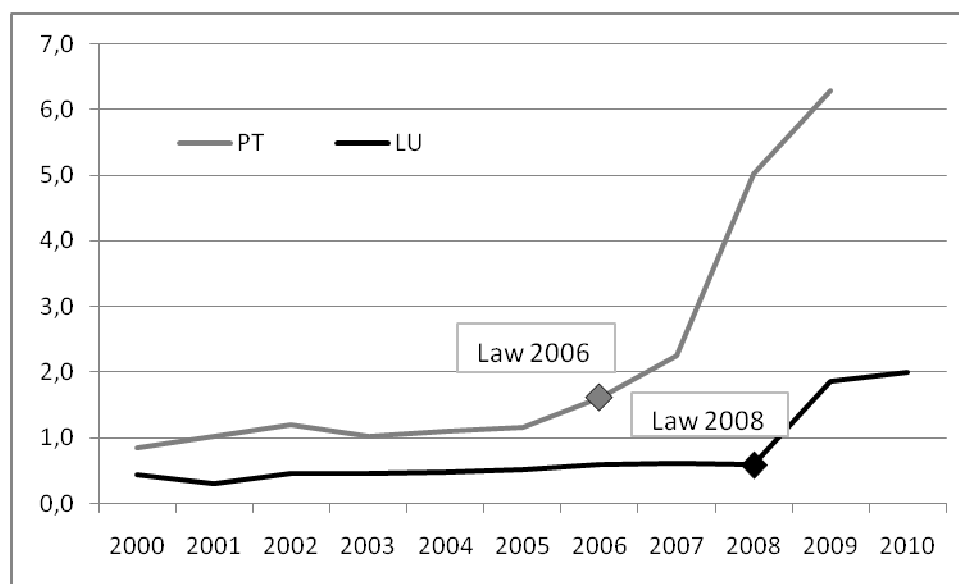
Portugal and Luxembourg have recently changed their naturalisation laws, expanding access to citizenship and therefore making citizenship more accessible to non-citizens. The effects of these changes can be observed in the naturalisation rates before and after the introduction of the new laws (see Figure 2). In Portugal, the average naturalisation rate between 2000 and 2005 was 1.1. After the new naturalisation law in 2006, the naturalisation rate increased by a factor of 3.6 to an average rate of 3.8 between 2006 and 2009.<sup>21</sup> However, the data on the foreign population in Portugal are not consistent before and after 2007, and therefore the naturalisation rates cannot be taken as a valid indicator for the effects of the new law. The number of naturalisations shows the impact of the new law much more powerfully; naturalisations increased from just below 3,000 in 2005 to almost 28,000 in 2009, which is an increase by a factor of more than nine. The reasons for this enormous increase in naturalisations can be explained by various factors, most notably the reduction of the required duration of residence and not restricting prove of residence to particular types of residence permits, new opportunities provided for children who completed basic schooling in Portugal as well as many proactive efforts to facilitate naturalisation in Portugal (Healy 2011).

In Luxembourg too, the naturalisation rate went up immediately after the introduction of the new law in 2008 (Figure 2). The naturalisation rate increased from a rather stable average of 0.5 between 2000 and 2008 to 1.87 in 2009 and further to 2.0 in 2010. The increase in the number of naturalisations was not, however, as pronounced in Luxembourg as it was with Portugal. Annual naturalisations ranged from some 500 to around 1,200 between 2000 and 2008. In 2009 and 2010, the numbers of naturalisations increased by a factor of 3.5 to 4,022 and 4,311, respectively.

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<sup>21</sup> It is important to note that the data on naturalisations and on the foreign population in Portugal are not without doubt and are partly contradictory. The foreign population as reported by Eurostat increased from 2006 to 2007 by almost 60 percent. The numbers of citizenship acquisitions were not available at Eurostat for the years 2007 and 2009 and were taken from the website of the Portuguese Ministry of Justice (<http://www.siej.dgpj.mj.pt/>, accessed in April 2011). These statistics do not exactly correspond to the number of citizenship acquisitions for other years.

**Figure 2: Naturalisation rates in Portugal and Luxembourg, 2000 to 2010**



Source: own calculations based on Eurostat data on foreign citizens from 2000 to 2010 and the number of citizenship acquisitions from 2000 to 2008. The number of citizenship acquisitions in Portugal for 2007 and 2009 were taken from the website of the Portuguese Ministry of Justice<sup>22</sup> and the number of citizenship acquisitions in Luxembourg for 2009 and 2010 were taken from a response to a parliamentary inquiry, published at the website of ASTI Luxembourg<sup>23</sup>.

In view of the influence of legal regulations, as measured by the MIPEX, (changes in) naturalisation rates can be predicted on the basis of the changes in the MIPEX 2010 as compared to 2007. This might not be so interesting if the actual data were available, however, given the fact that the naturalisation statistics for 2010 are not so easily available (i.e. not yet published by Eurostat) a prediction of naturalisation rates and actual naturalisations presents an interesting exercise.

Table 5 presents the results of the estimated naturalisation rates for the total foreign population as well as the rates for third-country nationals of the year 2010. The rates were estimated based on the total rates of 2007 and the third-country nationals rates of 2008, respectively, and the changes in the MIPEX scores. The influence of the MIPEX scores from the regression models on the naturalisation rates was used as a factor for the changes in the naturalisation rates. Thus, if the MIPEX has changed by a score of +10 from 2007 to 2010, it was estimated that the 2007 naturalisation rate has changed by 0.46 in 2010, which equals the coefficient of the MIPEX in 2007 (0.046) multiplied by 10. If the MIPEX has not changed, no changes in naturalisation rates were predicted.

According to this prediction, an average total naturalisation rate of 3.0 is predicted for the year 2010, which is a minor increase of 0.1 compared to 2007. The naturalisation rate for non-EU citizens is expected to increase from 3.6 in 2008 to 3.8 in 2010. Based on the estimated naturalisation rates, the corresponding numbers of naturalisations was estimated using the number of foreign population and third-country nationals in 2010 (which is available from Eurostat). Since the MIPEX explains only between 27 and 36 percent of the naturalisation rates in 2007 and 2008, the estimate neglects many factors that influence naturalisations. Altogether, based on changes of the MIPEX, a total number of 878,927 acquisitions of citizenship are estimated for the year 2010 in the EU-25, Norway and

<sup>22</sup> <http://www.siej.dgpj.mj.pt/> (accessed in April 2011).

<sup>23</sup> *Réponse de Monsieur le Ministre de la Justice Francois BILTGEN a la question parlementaire no.1228 du 3 fevrier 2011 de Monsieur le Depute Marc Spautz.* Available at: <http://www.asti.lu/2011/03/15/nombre-de-personnes-ayant-acquis-la-nationalite-luxembourgeoise/> (accessed on 28 April 2011).

Switzerland. Of those, 674,802 naturalisations are expected to concern (former) non-EU citizens. Consequently, from 2007 to 2010 the total number of citizenship acquisitions is expected to have increased by 14 percent and the citizenship acquisitions of previously non-EU citizens by 6 percent. Yet, it should be kept in mind that the changes in naturalisation regulations in the UK did not come into force in 2010, which means that the actual naturalisations might be slightly underestimated. In addition, the increases or decreases in the estimated total number of naturalisations is also related to increases or decreases in the foreign population in each country, which is the basis for the calculation. The foreign population in the EU-25 countries, Norway and Switzerland has increased by 12.6 percent from 2007 to 2010 and the number of third-country nationals only by 3.4 percent. This primarily explains the higher increase in the estimated total number of citizenship acquisitions.

Considerable increases in the MIPEX can be observed in Greece (+38.5) and Luxembourg (+32.1), while the MIPEX significantly decreased in Slovakia (-11.9) and the United Kingdom (-15.9). As a result, only in these countries a major change in naturalisation rates can be estimated. However, the new laws introduced in the United Kingdom were not in force in 2010, which means that the changes must not be taken into account. Based on the changes in the MIPEX, the total naturalisation rate in Greece is expected to have increased from 0.44 in 2007 to 2.1 in 2010. The third-country national naturalisation rate for Greece is estimated to have increased by 2.7 percentage points from 1.9 to 4.6. The rates in Luxembourg are estimated to have increased from 0.62 and 1.8 to 2.0 and 4.1. The decreases in Slovakia and the United Kingdom are expected to lead to decreases in the naturalisation rates by -0.5 percentage points (by -0.8 for the TCN rate) and by -0.7 (-1.1) percentage points, respectively.

Due to the availability of recent naturalisation statistics from Luxembourg (source is indicated in Figure 2, above), the validity of the estimate for the total naturalisation rate can be tested against the real statistics. From 2008 to 2009, the number of naturalisations increased from 1,215 to 4,022. In 2010, the number further increased to 4,311, which leads to an increase in the naturalisation rates from 0.6 in 2008 to 2.0 in 2010. Most interestingly, the estimation has accurately estimated the total naturalisation rate of 2.0 in 2010. This demonstrates that, based on the calculations in this paper and the MIPEX, possible changes in naturalisation rates can correctly be estimated, although a single case does not suffice to prove the reliable functioning of the method. The precision of the estimation for third-country nationals cannot be tested due to unavailability of data. It should be noted that the most important groups of naturalised citizens in Luxembourg were from Portugal, Italy, Germany, France and Belgium in 2009 and 2010. These groups are followed by third-country nationals from Bosnia and Herzegovina, Serbia and Montenegro. Thus, Luxembourg is a special case in terms of naturalisations of high numbers of citizens from other EU countries.

In addition, it has to be kept in mind that the prediction of changes in naturalisation rates is based on cross-sectional, cross-national estimates and might not be simply applied to longitudinal changes in naturalisation rates in one country. Nevertheless, the results have shown that the naturalisation rates can accurately be predicted, which means that the results and method can be used for *ex ante* evaluations of intended or planned policy changes in a country. The next section discusses limitations of the approach of the present analysis and discusses methodological advantages and shortcomings of measuring impacts of legal regulations on citizenship acquisitions at the national level in a comparative perspective.



**Table 5: Prediction of naturalisation rates and naturalisations on the basis of the MIPEX<sup>24</sup>**

	Differences in MIPEX (2010-2007)					Estimated Nat. Rates		Estimated Nat. Numbers	
	total	elig	cond	sec	dual	Total	TCN	Total	TCN
BE	0.0	0	0.0	0	0	3.9	8.4	40732	28220
CZ	0.0	0	0.0	0	0	0.8	0.4	3397	1213
DK	0.0	0	0.0	0	0	1.3	2.8	4326	5904
DE	7.2	0	14.5	14.3	0	1.9	2.2	132653	100202
EE	0.3	0	1.2	0.0	0	1.8	1.0	3843	1979
IE	-1.8	0	-7.1	0.0	0	1.0	1.8	3675	1195
GR	38.5	70	26.9	7.1	50	2.1	4.6	19661	36041
ES	0.0	0	0.0	0.0	0	1.6	2.6	88443	87653
FR	0.0	0	0.0	0.0	0	3.6	5.0	136302	123062
IT	-1.8	0	-7.1	0.0	0	1.5	1.8	62369	52932
CY	0.0	0	0.0	0.0	0	2.4	3.4	2997	1484
LV	-0.5	0	-1.9	0.0	0	1.9	1.0	7459	3834
LT	0.0	0	0.0	0.0	0	0.9	0.8	346	265
LU	32.1	0	-14.5	42.9	100	2.0	4.1	4252	1204
HU	3.6	0	0.0	14.3	0	5.2	3.3	10358	2639
MT	0.0	0	0.0	0.0	0	4.0	6.3	665	713
NL	0.5	0	1.9	0.0	0	4.5	4.3	29446	14623
AT	0.0	0	0.0	0.0	0	1.7	1.7	15256	9437
PL	0.0	0	0.0	0.0	0	2.8	4.9	1277	1505
PT	0.0	0	0.0	0.0	0	5.2	6.7	23563	24233
SI	0.0	0	0.0	0.0	0	2.9	2.4	2380	1862
SK	-11.9	0	-19.0	-28.6	0	4.1	1.4	2578	334
FI	2.5	10	0.0	0.0	0	4.1	7.0	6289	6910
SE	0.0	0	0.0	0.0	0	6.8	7.9	40360	25715
UK*	-15.9	-35	-28.6	0.0	0	3.8	4.1	167204	100200
NO	0.0	0.0	0.0	0.0	0.0	6.2	7.3	20702	10621
CH	0.0	0.0	0.0	0.0	0.0	2.8	4.8	48392	30823
SUM								878927	674802

Legend: elig = eligibility, cond = conditions for acquisition, sec = security of status, dual = dual nationality.

\*The new citizenship law in the United Kingdom was not in force in 2010, which is why the effects/changes can only be predicted for later years.

<sup>24</sup> Estimated naturalisation rates based on changes in the total MIPEX score. Estimated numbers of naturalisations based on estimated naturalisation rates and foreign population statistics from Eurostat, table migr\_pop (downloaded on 12 April 2011).

## 5. Methodological considerations: exploring the influence of legal regulations on citizenship acquisitions

When discussing the results and comparing the different models in this paper, it becomes clear that the approach taken is associated with several problems. Although a statistical relationship of naturalisation rates and legal regulations, measured through an index (MIPEX), can be observed, the relationship is fairly weak, which is also a result of the small number of countries included in the analysis as well as the fact that there are countries for where this relationship cannot be observed (e.g. Norway or Germany). The inclusion or removal of one or two countries can considerably change the statistical relationship (e.g. removing Norway improves the statistical relationship). Thus, the analysis only serves as a general overview indicating the direction of a relationship in the countries under study and therefore the relationship cannot simply be conveyed to other countries. This issue is related to the general methodological approach of using nation states as units of analysis. This approach completely neglects the influence of regional and local citizenship policies, which are, nonetheless, of major importance for naturalisation practices (see for instance Manatschal 2011).

Furthermore, the use of 'general' naturalisation rates, based on the total number of citizenship acquisitions, is problematic for three specific reasons: they do not consider the duration of residence of non-nationals and naturalised persons in the respective country, they include different types of naturalisation and, if not broken down by country of origin, they neglect the heterogeneity of the foreign population.

Firstly, the fact that the duration of residence, one of the basic requirements for naturalisation in all countries, is not taken into account lessens the validity of naturalisation rates as a measure of naturalisation behaviour. It uses the total foreign population, which also covers recently immigrated persons, who are not eligible for citizenship. Consequently, rising immigration flows immediately decrease naturalisation rates, although no changes in the naturalisation behaviour of non-nationals have occurred. For this reason Nicolas Perrin (2006) recommends using a cohort approach for measuring naturalisation behaviour. This approach would allow the assessment of naturalisation behaviour of immigration cohorts after different time periods, thus indicating the general likelihood of certain cohorts to naturalise. Nonetheless, the required length of residence is part of the citizenship policy of a country and differences in the required residence between countries have to be taken into account in cross-national analyses as well.

Secondly, as Bisogno and Gallo (unpublished) argue, the use of raw naturalisation rates does not clearly reflect naturalisation propensities and behaviour, since naturalisation rates are usually based on the total number of citizenship acquisitions and not naturalisations in a more narrow definition, as there are several forms of citizenship acquisition and naturalisation. This point is also related to the fact that the total foreign population as such is a heterogeneous population that is composed of several groups of citizens, from different countries of origin, facing different legal situations (e.g. EU or non-EU, refugees or non-refugees, persons born in Latin-America in Spain, or so-called *Spätaussiedler* in Germany, etc.) and with differing demographic and socio-economic characteristics. This diversity in the foreign population is not accounted for in the total number of citizenship acquisitions (see also Vink 2010 and Janoski 2011 for a discussion on naturalisation rates). Nevertheless, given the complexity of influential factors on naturalisations, naturalisation rates still define an important demographic indicator, which reflects general developments and differences in the demographic composition of a population.

Thirdly, as is the case with total naturalisation rates, an index only measures the general naturalisation regulations related to third-country nationals, which do not apply to EU citizens and other groups that enjoy special treatment, presenting another drawback. As already mentioned above, the selection of indicators and its categories might change the influence of the index on naturalisation rates. This is related to the general question of where the threshold is, which significantly changes the influence of certain regulations. For instance, what level of income, what level of language knowledge

or which exemptions from the requirement of renunciation of previous citizenship present a real barrier for a considerable number of potential naturalisation candidates? Furthermore, it is difficult to measure discretionary practices by authorities with an index, especially because discretion can be used in both directions, towards a more liberal or more restrictive naturalisation practice. This possible difference in the citizenship laws and their implementation is referred to as the implementation gap by Mathias Czaika and Hein de Haas (2011). Generally speaking, policy analysis has to consider several phases and influences in order to evaluate the impact of policy measures on the population concerned (for a discussion of using indexes for policy impact analysis, see Huddleston and Niessen 2009).

To sum up, one of the major problems of the approach taken in this paper is the use of aggregate data for assessing individual behaviour. By using aggregate statistics, several group characteristics are ignored, which can lead to incorrect conclusions, usually referred to as ecological fallacy. Ideally, data on the individual level would be used to estimate the likelihood of persons to naturalise, while the influence of several additional variables is controlled for. Individual (or micro) data on naturalisations, including additional information on individual characteristics of persons, are obtained from surveys. Jaap Dronkers and Maarten Vink (unpublished) used a pooled sample of the European Social Survey (ESS) to estimate the individual likelihood of residents in the EU-15 countries to obtain citizenship by controlling for characteristics on the individual level, on the country of residence level as well as on the country of origin level. The analysis shows, as already mentioned above, that the legal regulations on the national level impact on the likelihood of persons to naturalise. However, this impact is lower than those of the other levels, namely country of origin factors and more importantly individual characteristics of immigrants and their children. Several country case studies have estimated influencing factors on the likelihood of immigrants to naturalise on the individual level (Bevelander and De Voretz 2008a, OECD 2011), but only the study by Gonzalez-Ferrer and Cortina Trilla (2011) for Spain accounts for the influence of different naturalisation regulation schemes. By using the method of event history analysis the study on Spain also considers the factor of time, which is so important for migration and integration research and yet is often neglected, mostly due to the unavailability of data. As already mentioned above, the actual duration of residence until naturalisation is of major importance as an indicator for naturalisation behaviour and its related integration of immigrants into the nation state. Differentiating by the duration of residence until naturalisation allows for analysing how long legal regulations can delay the naturalisation of certain groups of immigrants. I found that restrictions in the legal regulations in Austria in 1998 and again in 2006 led to a longer average duration until naturalisation of immigrants, all other influential factors constant (Reichel 2011: 153-156). However, the detailed implications of earlier or delayed naturalisation need to be further examined.

The duration of residence until naturalisation can be measured by surveys that include information on the year of immigration and the year of naturalisation but also by utilising register data. More generally, possibilities and limitations of analysis are constrained by the availability of data. While registration data or data from population censuses exhaustively cover the entire (registered) population, they often lack important additional information and are not easily comparable to other countries' register data (cf. Reichel 2010b, Bevelander and DeVoretz 2008b). The advantage of survey data is therefore the availability of additional variables (on socio-economic status, migration history, etc.) and, in the case of internationally conducted surveys, its comparability. Shortcomings of survey data, by contrast, are possible biases that occur during sampling and small sample sizes (cf. Kraler and Reichel 2010: 28-32). Accordingly, the present analysis has the advantage of using register data, which comprehensively cover the whole population under study, whereby the lack of additional control variables limits the possibilities.

Altogether, the approach of this paper is a general one, which can never replace detailed in-depth studies of naturalisation policies and their effects on naturalisations within countries or regions. Citizenship and migration policy research demands inter-disciplinary and multi-methodological approaches, in order to shed light on the impacts and implications of the decisions of members of

national and regional parliaments. Policy impact analysis is an important area which furthers the knowledge for critical policy research and evidence-based policy making.

## **6. Conclusions**

This paper confirms a simple hypothesis. The easier access to citizenship in a European country, the more non-citizens naturalise. The openness of naturalisation regulations is measured through MIPEX Nationality, which considers several legal obstacles that restrict access to citizenship in a country. Our analysis indeed confirms that the legal conditions for naturalisation have a significant impact on naturalisation rates. It is widely accepted that acquisition of national citizenship represents an important marker for the integration of immigrants and their children. The question that remains open is: to what extent states want to use citizenship as a mean for integration.

What is more, the requirement to renounce previous citizenship appears to be one of the most important reasons for why persons cannot or do not want to get naturalised. This is related to the linkages that persons retain to their country of origin and might go hand in hand with an existing wish to return, even if only temporary return is planned.

What prevention from or privileged access to naturalisation actually means to immigrants has not been extensively researched so far. Nevertheless, the acquisition of citizenship of the country of residence is part of the full integration of persons in terms of civil, political and social inclusion.

## References

- Aleksynska Mariya and Algan Yann (2010): Assimilation and Integration of Immigrant in Europe. IZA Discussion Paper No. 5185.
- Bevelander Pieter and DeVoretz Don (2008a) (Eds): *The Economics of Citizenship*. Malmö University, MIM.
- Bevelander Pieter and DeVoretz Don (2008b): *The Economics of Citizenship: A Synthesis*. In: Bevelander Pieter and DeVoretz Don (Eds): *The Economics of Citizenship*. Malmö University, MIM, 155-168
- Bisogno Enrico and Gallo Gerardo (unpublished): *The acquisition of citizenship: the first or the last step along the integration process of immigrants? A comparison among seven European countries*. Unpublished manuscript.
- Christopoulos Dimitris (2011): *Greek State Council strikes down ius soli and local voting rights for third-country nationals. An Alarming Postscript to the Greek Citizenship Reform*. EUDO Citizenship Website new item. 09 March 2011. [www.eudo-citizenship.eu](http://www.eudo-citizenship.eu)
- Cinar Dilek (2006): *The politics of external citizenship – the case of Turkey*. Text Box 4. In: Bauböck Rainer (Ed): *Migration and Citizenship. Legal Status, Rights and Political Participation*. Amsterdam University Press.
- Czaika Mathias and de Haas Hein (2011): *The effectiveness of immigration policies. A conceptual review of empirical evidence*. DEMIG/ IMI Working Papers. Paper 33. DEMIG project paper no. 3. Available at: <http://www.imi.ox.ac.uk/pdfs/imi-working-papers/wp-11-33-the-effectiveness-of-immigration-policies> (accessed in May 2011).
- Dronkers Jaap and Vink Maarten Peter (unpublished): *Explaining access to European citizenship: linking policy output and outcome*. Unpublished manuscript, June 2011.
- EUDO Citizenship (2008): *The EUDO Glossary on Citizenship and Nationality*. 09 March 2011: <http://eudo-citizenship.eu/citizenship-glossary/>
- Geddes Andrew et al. (2005): *European Civic Citizenship and Inclusion Index*. British Council, Migration Policy Group. Available at: [www.mipex.eu](http://www.mipex.eu) (accessed in May 2011)
- Goodman Sara Wallace (2010): *Naturalisation Policies in Europe: Exploring Patterns of Inclusion and Exclusion*. EUDO Citizenship Comparative Reports. Available at: <http://eudo-citizenship.eu/comparative-analyses> (accessed in March 2011)
- Gonzalez-Ferrer Amparo and Cortina Trilla Clara (2011): *Naturalisation decisions in Spain. The importance of legal asymmetries*. Paper presented at PAA 2011, Washington. Session 156: *Immigration in Comparative Perspective*.
- Healy Claire (2011): *Cidadania Portuguesa: A Nova Lei Da Nacionalidade de 2006*. Observatorio da Imigracao, 45.
- Helbling Marc (2010): *Which indicators are most useful for comparing citizenship policies? Kickoff contribution to online debate*. <http://eudo-citizenship.eu/citizenship-forum/380-which-indicators-are-most-useful-for-comparing-citizenship-policies>, September 24, 2010.
- Howard Marc Morjé (2009): *The Politics of Citizenship in Europe*. Cambridge et. al: Cambridge University Press.
- Huddleston Thomas et al. (2011): *Migrant Integration Policy Index III*. British Council, Migration Policy Group. Available at: [www.mipex.eu](http://www.mipex.eu) (accessed in March 2011).

- Huddleston Thomas and Niessen Jan (2009): On Using Indicators for Raising and Meeting Integration Standards. In: Niessen Jan and Huddleston Thomas (Eds): *Legal Frameworks for the Integration of Third-Country Nationals*, Leiden: Martinus Nijhoff Publishers, 15-46.
- Janoski Thomas (2010): *The Ironies of Citizenship: Naturalisation and Integration in Industrialized Countries*. Cambridge et al.: Cambridge University Press.
- Janoski Thomas (2011): What we need citizenship indicators for depends on who are “we”. Contribution to EUDO Citizenship forum debate on Which indicators are most useful for comparing citizenship policies? By Marc Helbling. <http://eudo-citizenship.eu/citizenship-forum/380-which-indicators-are-most-useful-for-comparing-citizenship-policies?start=4>, January 2011.
- Kraler Albert and Reichel David (2010): *Statistics on Migration, Integration and Discrimination in Europe*. PROMINSTAT Final Report. Vienna: ICMPD, European Commission.
- Latcheva Rossalina, Obermann Judith and Herzog-Punzenberger Barbara (2006): *SiM. Between Equal Opportunity and Marginalisation. A Longitudinal Perspective on the Social Integration of Migrants*. Endbericht, Zentrum für Sozial Innovation.
- Manatschal Anita (2011): On the relevance of comprehensive comparative analyses at the subnational level. Contribution to EUDO Citizenship forum debate on Which indicators are most useful for comparing citizenship policies? By Marc Helbling. <http://eudo-citizenship.eu/citizenship-forum/380-which-indicators-are-most-useful-for-comparing-citizenship-policies?start=6>, March 2011.
- Niessen Jan et al. (2007): *Migrant Integration Policy Index*. British Council, Migration Policy Group. Available at: [www.mipex.eu](http://www.mipex.eu) (accessed in May 2011)
- OECD (2011): *Naturalisation: A Passport for the Better Integration of Immigrants?* OECD Publishing.
- Perrin Nicolas (2006): *A Cohort Approach to Acquisition of Citizenship Statistics*. In: Poulain Michel, Perrin Nicolas and Singleton Ann (Ed.): *THESIM. Towards Harmonised European Statistics on International Migration*. Presses Universitaires de Louvain.
- Reichel David (2010a): We need different indicators for different research questions. Contribution to EUDO Citizenship forum debate on ‘Which indicators are most useful for comparing citizenship policies?’ by Marc Helbling. <http://eudo-citizenship.eu/citizenship-forum/380-which-indicators-are-most-useful-for-comparing-citizenship-policies?start=1>, October 2010.
- Reichel David (2010b): *Measuring Determinants and Consequences of Citizenship Acquisition*. PROINSTAT Working Paper No. 15. <http://www.prominstat.eu/drupal/?q=node/73> (accessed June 2011).
- Reichel David (2011): *Staatsbürgerschaft und Integration. Die Bedeutung der Einbürgerung für MigrantInnen*. Wiesbaden: VS Verlag für Sozialwissenschaften. Forthcoming in summer 2011.
- Sartori Fabio (2011): *Acquisitions of citizenship on the rise in 2009*. Eurostat Statistics in focus, 24/2011.
- Vink Maarten (2010): Naturalisation rates and rejection rates measure different phenomena, and have different problems. Contribution to EUDO Citizenship forum debate on ‘Which indicators are most useful for comparing citizenship policies?’ by Marc Helbling. <http://eudo-citizenship.eu/citizenship-forum/380-which-indicators-are-most-useful-for-comparing-citizenship-policies?start=2>, October 2010.
- Vink Maarten and de Groot Gerard-René (2010): *Citizenship Attribution in Western Europe: International Framework and Domestic Trends*. In: *Journal of Ethnic and Migration Studies*, Volume 36, No. 5, May 2010, 713-734.

- Waldrauch Harald (2006): Acquisition of nationality. In: Bauböck Rainer, Ersboll Eva, Groenendijk Kees & Waldrauch Harald (Eds): Acquisition and Loss of Nationality. Policies and Trends in 15 European States. Volume 1: Comparative Analyses. Amsterdam University Press, IMISCOE Research, 121-182.
- Waldrauch Harald and Cinar Dilek (2003): Staatsbürgerschaftspolitik und Einbürgerungspraxis in Österreich. In: Fassmann Heinz and Stacher Irene (Eds): Österreichischer Migrations- und Integrationsbericht. Demographische Entwicklungen, sozioökonomische Strukturen, rechtliche Rahmenbedingungen. Klagenfurt: Drava Verlag, 261-283.
- Wunderlich Tanja (2005): Die neuen Deutschen: Subjektive Dimensionen des Einbürgerungsprozesses. Stuttgart: Lucius & Lucius.

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