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Don J. DeVoretz

Simon Fraser University and IZA

Nahikari Irastorza

*Malmö Institute for Studies of Migration,
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ABSTRACT

Economic Theories of Citizenship?

This paper explores the relationship of immigrant citizenship ascension and the effect on the naturalized citizen's economic outcomes in Europe and North America. We offer a unique model and empirical outcomes to define optimal waiting periods for immigrant ascension to citizenship by entry class and human capital requirements for country specific examples.

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Corresponding author:

Don J. DeVoretz
Simon Fraser University
Burnaby, B.C.
Canada
E-mail: devoretz@sfu.ca

1. Introduction

The economic analysis of the acquisition and impact of citizenship ascension in its modern form *circa* 2000 onwards is limited to a complex heterogeneous model which we will develop below. The need for this complex citizenship ascension model and the dismissal of the earlier naïve club or labour market models is a byproduct of the need to jointly consider an analysis of the economic impact of citizenship on several parties. In fact, there is a need of a rich and complex economic model of citizenship ascension to answer a host of questions. First, does there in fact exist a citizenship premium? The answer in the 21st century is yes in general. However naïve economic models that focus on labour market outcomes have left these premiums undetected in the past (see, for example, the classic work by Becker in the United States).¹ This purported lack of economic premiums from citizenship ascension left the economic analysis of citizenship ascension dormant until the early 21st century.

Beyond this general question of the existence of a citizenship economic premium lies a host of more specific questions which must be addressed with a modern economic ascension model. First, how and why does the economic citizenship premium vary by gender, immigrant source country, immigrant entry class and waiting period for citizenship ascension? It is important to note at this point that the answers to these posed questions have important host country policy implications since addressing the influx of immigrants and time to ascension will allow the host country to maximize the derived economic benefits of citizenship ascension.

The second major question to address with an economic model of ascension is who are the economic winners or losers in the ascension process? In short, do host country residents economically gain or lose when a newly ascended immigrant appears? Moreover, what are the tax implications in the host country from citizenship ascension? In short, do new citizens pay more in taxes than they use in services implying a net gain to existing residents? Both the average citizenship age and remaining lifetime income will influence the answer to this question and a life cycle economic model of citizenship ascension will be needed to aid in the tax analysis. In a wider sphere we must ask if the immigrant sending country is negatively or positively economically affected by citizenship ascension in the host country. Moreover, does the presence or absence of dual citizenship provisions in both the sending and host countries affect the size of the positive economic contributions to the sending countries from citizenship ascension in the host country?

In addition, any economic model of citizenship ascension must be able to measure the impacts of existing immigrant and citizenship selection policies in a precise manner to decompose the source of the generally observed economic gain from citizenship ascension. As alluded to above, the immigrant sending country and immigrant human capital selection criteria along with a knowledge of the optimal waiting period for ascension will allow the host country to absorb new citizens at no cost or maximum benefit to the resident population

¹ Gary Becker, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1973).

depending on the host country's goal. This policy oriented analysis of the economic impact of citizenship ascension expands on the "club theory" model which suggested that the admission of immigrants into the "citizenship club" was predicated on existing club members gaining from their citizenship ascension. Without denying this general principle, the more modern economic model of citizenship ascension allows both an analysis of the sources of any premium but also provides policy instruments to measure the source of these contributions of economic benefits to existing club members.

At this point a summary question emerges: what modern economic theory of citizenship ascension provides a tool to answer the above posed questions? An endogenous human capital model involving citizenship ascension is the only extant economic theory to analyze and provide answers to the posed questions for a variety of immigrants across source countries with different levels of human capital. In short, a model which recognizes that the accumulation of various forms of human capital needed for citizenship ascension and the resulting economic premium from citizenship ascension leads to a select group of citizenship candidates.

The rest of this chapter is organized as follows: next we present earlier economic approaches to citizenship and migration based on the club goods theory and we discuss their limitations. In section 3 we further develop the human capital theory of the economic impact of citizenship ascension introduced above. We then discuss the economic costs and benefits of citizenship acquisition for immigrants, origin and destination countries and illustrate these ideas with empirical examples from Europe and North America. The last section presents our conclusions.

2. Economic theory of clubs and citizenship ascension

In his book "Citizenship and Immigration" Christian Joppke refers to Straubhaar in order to compare state membership (i.e. citizenship) to club membership.² One of the points of comparison presented in the book concerns the economic aspect of citizenship. He explains that in a world of migration, where an increasing number of people choose their states, these states become instrumental associations with robust admission policies. According to these policies, for existing members, the benefits of accepting new members must be greater than the costs implied in this decision. Furthermore, he cites two "legitimate" admission criteria: the willingness to accept the club rules and the new members' ability to pay.

These state and club membership concepts point us to the further impacts of naturalization on the state as cited by Tiebout and Buchanan.³ In his attempt to build a satisfactory theory of public finance, one of the assumptions made by Tiebout is as follows: there is an optimal community size for every public service provided by the state to the members of such a community. This optimum, which implies that public goods are limited, is defined by the

² Christian Joppke, *Citizenship and Immigration* (Cambridge: Polity Press, 2010).

³ James M. Buchanan, 'An Economic Theory of Clubs', *Economica* 32, 125, (1965): 1-14; Charles M. Tiebout, 'A Pure Theory of Local Expenditures', *Journal of Political Economy* 64, 5, (1956): 416-424.

number of residents for which such services can be produced at the lowest average cost.

Likewise, according to Buchanan's economic theory of clubs, there is an optimal membership for almost any public or private activity people may engage in. The central question, according to him, is to determine the membership margin or the size of the most desirable cost and consumption sharing arrangement. As stated by Samuelson, unlike in the case of purely private goods, consumption of public goods by any one individual implies equal consumption by all others.⁴ However, the utility that each member receives from the consumption of any public or private good or service depends on the number of individuals who share their benefits, i.e. the size of the club. Full equilibrium in club size will be reached when the marginal benefits and costs of having a new member for any existing member are equal.

While Tiebout and Buchanan's ideas have inspired many scholars, they have also been contested by a few. In his proposal for a new concept of citizenship which he names "Citizenship: Organizational and Marginal", Frey refers to Buchanan's theory of clubs in the sense that (i) non-members can be excluded and (ii) the consumption among the citizens has public good characteristics.⁵ However, he states that while Buchanan's analysis focuses on the benefits and costs of adding a member, the special relationship between the members and their club based on intrinsic motivations such as trust and loyalty is neglected.

Ruhs and Martin also address the question of the optimal community size by exploring the relationship between migrant numbers and rights.⁶ These authors claim that there is an inverse relationship between the number and rights of migrants employed in low-skilled jobs in high-income countries. This is generated by (i) the increased labor costs associated with more employment rights for workers, from the employers' perspective and (ii) the desire of governments in destination countries to minimize the fiscal costs of low-skilled immigration, by keeping migrant numbers low or by restricting their access to welfare.

There is an almost unlimited supply of migrants willing to accept low-skilled jobs in high-income countries under conditions significantly lower than those mandated by international norms such as ILO and UN conventions for the protection of workers and migrant workers. On the contrary, according to Ruhs and Martin, due to the limited supply of qualified migrants, these are able to choose among competing destinations and their choice of destination will depend on expected earnings and rights in destination countries. It is important to remember, however, that there are many qualified migrant workers from poor countries working in low-skilled jobs in rich countries. Hence, we suggest adding the variable country of origin (low-income/low-status versus high-income/high-status countries) to the dichotomy qualified/skilled/highly skilled versus not qualified/low-skilled workers.

⁴ Paul A. Samuelson, 'The Pure Theory of Public Expenditures', *Review of Economics and Statistics* 36, 4, (1954): 387-89.

⁵ Bruno Frey, 'Flexible citizenship for a global society', *Politics, Philosophy & Economics* 2,1, (2003): 93-114.

⁶ Martin Ruhs and Philip Martin, 'Numbers vs. Rights: Trade-Offs and Guest Worker Programs', *The International Migration Review* 42, 1, (2008): 249-265.

Moreover, the definition of “skilled workers” also varies depending on destination countries. For example, whereas chefs, electricians and plumbers with high school diplomas qualify for the Federal Skilled Program in Canada - and therefore, can apply for express entry and permanent residence - they may not be considered skilled workers in other countries. As a result, the same migrant person working in the same occupation in two different destination countries could have more or less employment rights and benefits associated, among other factors, with the skill level of their job in such countries.

If we apply the ideas presented above to the study of citizenship, we could state that granting citizenship will be economically sustainable and even profitable for countries and their long-term members or citizens if the benefits of such action equal or surpass the costs involved in the process. This includes not only the initial legal-administrative process costs associated with admitting new citizens but also the relationship between the consumption of public goods and the total taxable income generated by immigrants after they become citizens. In order to establish whether this correlation is positive or negative, a comparison should be made between the new citizen’s public expenditure and revenue profiles in their pre-ascension versus post-ascension periods.

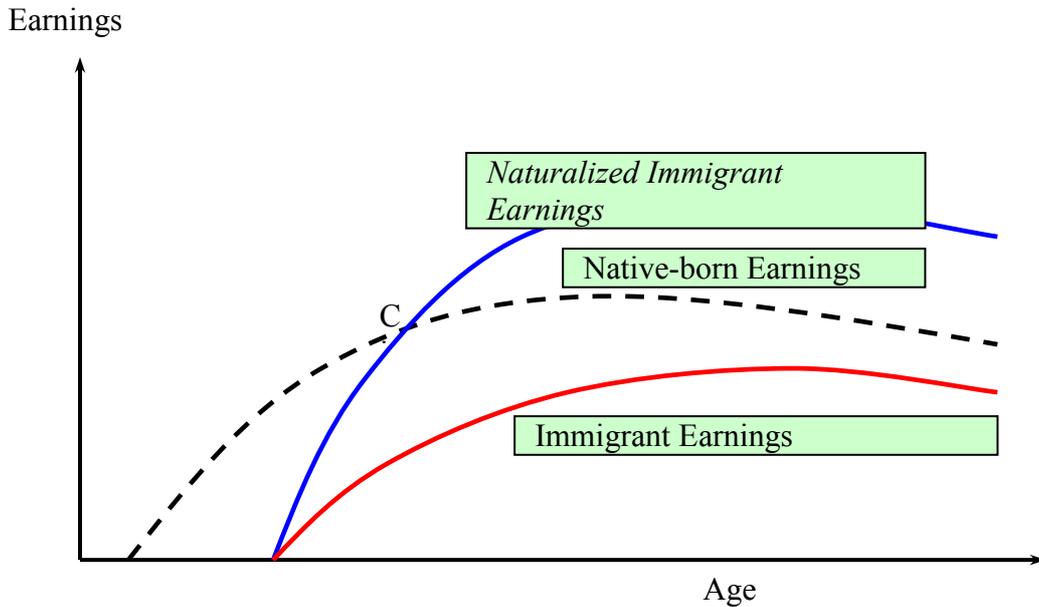
The discussion about numbers and rights is also relevant to assess the economic implications, for host countries, of granting citizenship to migrants. The costs and benefits of accepting new citizens vary among destination countries depending on a number of factors including: (i) the cost of the administrative process of citizenship ascension and who pays for them; (ii) the cost of the services provided by the state to their citizens versus the permanent residents in the host country; (iii) the tax revenue collected by the state from their citizens versus their permanent residents; and (iv) the economic premium of citizenship for new citizens versus permanent residents and its tax implications for the state. However, citizenship does not only have economic implications for the countries that grant it but also for the new citizens themselves and for their countries of origin, as we will see in the next section.

In sum, the theory of clubs as applied to the topic of the economics of citizenship provides a quasi-economic theoretical framework to address this topic but, by being too general, it lacks the precision to measure the economic impacts of citizenship ascension for a diversity of potential citizen candidates over time that is provided by the human capital theory. In the next section we develop such a theory.

3. Human Capital theory of the economic impact of citizenship ascension

We provide below a stylized version of this modern economic theory’s outcomes to better appreciate the main economic factors that yield the citizenship ascension premiums. Figure 1 represents an age-earnings profile for immigrant citizens and non- citizens in their chosen host country.

Figure 1 Age-Earnings Profiles Before and After Citizenship Ascension

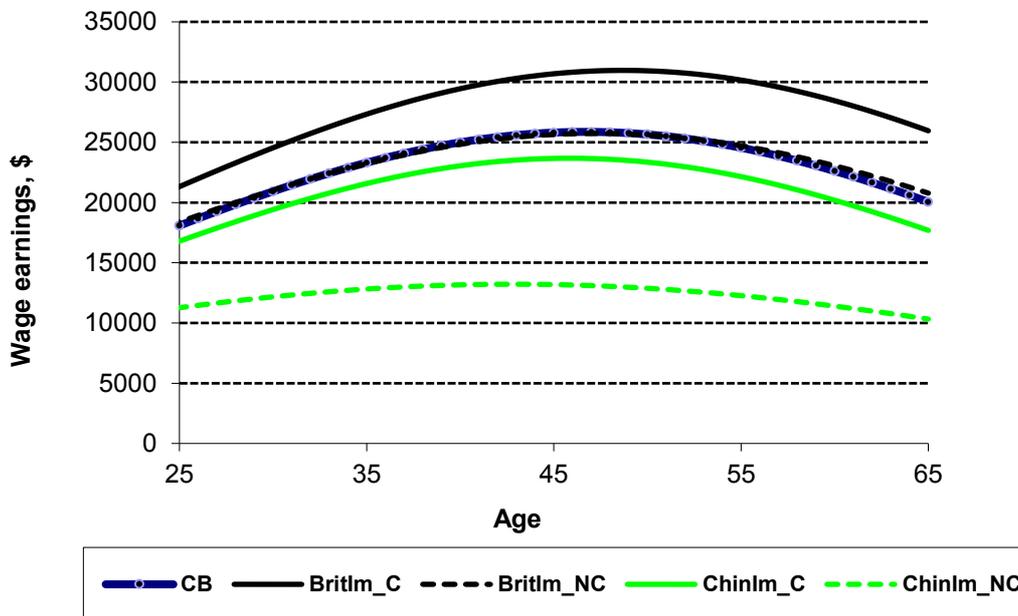


Source: DeVoretz and Pivnenko (2006)

In this two dimensional diagram time (age) and earnings are the primary analytical variables of the economic model with citizenship ascension and earnings affected by age for any stylized immigrant contemplating citizenship ascension. There exist several possible combinations of age-earnings profiles to deduce the size of the citizenship economic premium. In Figure 1 we produce three different age earnings profiles for host country native –born, next the host country immigrant population and finally their naturalized counterparts. Given these three profiles it is possible to produce two measures of the citizenship economic premium. The first measure of the citizenship premium would be the anticipated higher earnings of naturalized citizens relative to resident alien earnings. It is also possible to measure the citizenship premium of naturalized citizens relative to the native-born.⁷

⁷ Formerly these citizenship premia are measured in terms of the differences in lifetime discounted incomes from age of citizenship ascension to retirement. In other words, $E((Y_{ct}-Y_{nt})-(N_{ct}-N_{nt}))/1+t$ where t =age of citizen or non-citizen. If this value is greater for a citizen than non-citizen it measures the discounted lifetime economic premium associated with citizenship ascension.

Figure 2. Age-earnings profiles for the Canadian Born (CB), British Immigrants Canadian citizens (BritIm_C) and non-citizens of Canada (BritIm_NC), Chinese Immigrants Canadian citizens (ChinIm_C) and non-citizens of Canada (ChinIm_NC) circa 2006



Source: DeVoretz and Pivnenko (2006)

Figure 2 reports five Canadian actual age earnings streams *circa* 2006 to illustrate the effect of age, country of origin and citizenship status on earnings. First, immigrants from highly developed areas (U.K.) earn more throughout their lifetime in Canada than Canadian-born. However, there still exists a small earnings effect for U.K. immigrants after ascension to Canadian citizenship. In fact, the economic impact of citizenship ascension although small is immediate. In the case of mainland Chinese immigrants the economic benefit derived from ascension is substantial – and greater than that of British immigrants - but is insufficient to bring these new citizens to the income level of the average Canadian-born. Clearly, these diagrams can be reproduced for a variety of countries and a variety of skill or educational levels to deduce the relative earnings’ impacts of the human capital levels from citizenship status. Later we will report similar results for a variety of other countries.

How do we decompose the sources that accounts for these reported citizenship effects? In fact it is possible to calculate the results of the analysis of differences (Blinder-Oaxaca decomposition) for all ascending immigrant. In short, as found by DeVoretz and Pivnenko, there exists an endowment difference owing to education, age/labour market experience and skill level and a discrimination effect which measures the amount that productive characteristics of foreign-born are overvalued or undervalued relative to native-born.⁸ Table 1 reports the comparative results for the Canadian naturalized foreign-born male and female populations from developed (OECD) and less developed countries (non-OECD) countries circa 2006 relative to their Canadian-born populations. Only male OECD naturalized citizens experience negative discrimination relative to the Canadian-born male population. In fact, naturalized male and female workers from non-OECD countries experience a twenty percent or greater positive wage discrimination.

Table 1. Decomposition of wage differentials between naturalized and native-born Canadians

	Human capital endowments effect	"Discrimination component"	Wage differential
Females			
OECD	5.91%	-5.57%	0.34%
Non-OECD	9.87%	10.94%	20.81%
Males			
OECD	-5.81%	-7.06%	-12.86%
Non-OECD	5.10%	21.45%	26.55%

Source: DeVoretz and Pivnenko (2006)

A second economic measure is the public finance citizen ascension effect. In other words, what if any economic premium accrues to the host country resident population from an act of citizenship ascension?

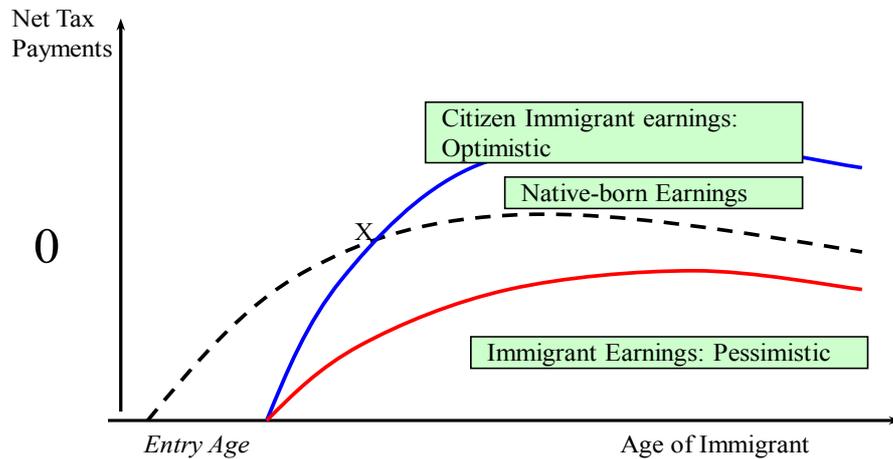
$$\text{Eq. 1 } E (T_t - C_t) / (1+t) < 0, =, > 0$$

In other words, Equation 1 represents the discounted lifetime difference in taxes paid by the ascended immigrant minus their consumption of public goods. The resulting value can be positive, zero or negative. If the net gain is positive then the host country residents gain from this citizenship admission to their "club" or country. If the net treasury gain is projected to be negative after citizenship ascension that could imply one of two policy actions. First, the immigrant may not be admitted to the host country based on this test since many countries employ a rule of positive treasury contribution prior to their citizenship ascension. However, some of those entrants (e.g. refugees) with prospective negative treasury contributions will

⁸ Don DeVoretz and Sergy Pivnenko, 'The economic determinants and consequences of Canadian citizenship ascension', in *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008).

after citizenship ascension partially offset their initial treasury deficit. In turn, other immigrants could have substantial treasury contributions after citizenship ascension, which could more than offset the treasury deficit owing to the admission of a refugee.

Figure 3. Net Tax Payments for Immigrants, naturalized and Native-born Citizens by Age



Source: DeVoretz and Pivnenko (2006)

Figure 3 depicts three predicted lifetime net treasury contributions for naturalized refugees (pessimistic), all other all other naturalized immigrants (optimistic) and native-born.⁹ Native-born are predicted to make a positive treasury contribution after age 30 until retirement at age 65. Refugees with or without citizenship status never make a positive treasury contribution but citizenship ascension reduces their treasury deficit according to the pessimistic case. All other immigrants (optimistic case) who ascend to citizenship make a positive treasury contribution. In sum, when refugees comprise a small percentage of all entrants the entire foreign-born naturalized population on average would make a positive treasury contribution. If treasury contributions were the sole criteria for immigrant selection and citizenship ascension the case depicted in figure 3 would imply that this host country could absorb more naturalized citizens to benefit their native-born population.

The implied positive net treasury gain depicted in figure 3 can actually turn is negative owing to the existence of dual citizenship coupled with return or ongoing immigration aided by host country citizenship. In this case of the host country resident citizens subsidizes the recently ascended immigrant citizen. The subsidy is in the form of a host country passport plus the prospect of returning to the host (or a third country) country upon retirement to obtain publically financed health and retirement care. For example, if the resident immigrant

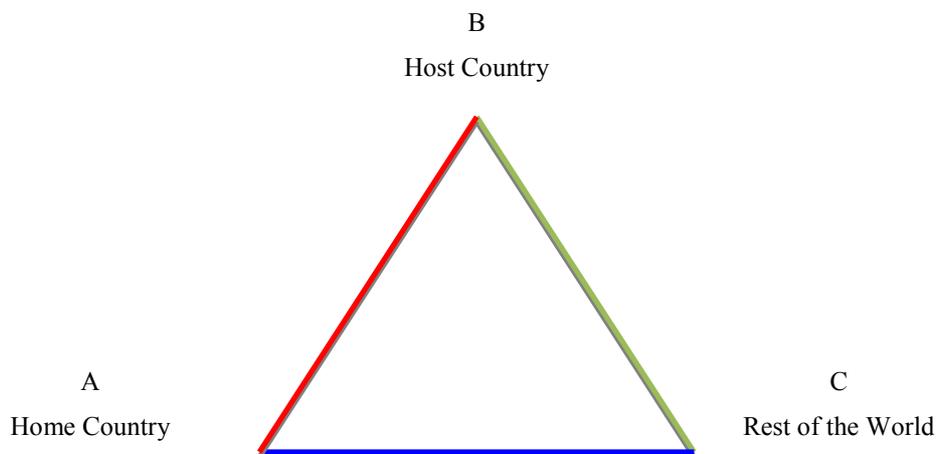
⁹ The net treasury contributions consist of federal and provincial income taxes minus federal and provincial expenditures on the individual.

wants to work in a third country but is prohibited by a lack of a proper passport then obtaining citizenship in the host country may equip her with a mobile passport to work in a third country or return to the host country to work if the latter also recognizes dual citizenship.

In sum, it is possible to have a positive economic premium accruing to the ascending immigrant (Eq.1>0) whilst the host country economic premium is negative (Eq.2<0).

The triangle in figure 4 allows us to fully appreciate the dynamics of these two economic premium measures.

Figure 4. Triangular Paths to Citizenship Ascension



Source: DeVoretz and Pivnenko (2006)

In figure 4 the potential citizen moves from country A (Home country) to B (Host Country) and waits the required time in the host country to ascend to citizenship. Now under conditions of dual citizenship in countries A and B the newly ascended immigrant citizen can stay in the host country, move on to either the Home or a third country (or the Rest of the world) and maintain or increase their economic premium gained from citizen ascension in Country B. The possible policy reactions of the host country with a simple movement from country A to B are nil since both the individual and the host country obtain the citizenship premium. In the case that the newly ascended citizen returns to the sending or third country for a long period of time future public goods may be denied to the returning ascended immigrant. In addition, citizenship ascending rules may change for the progeny of those naturalized citizens who have children born outside the host country. In short, citizenship of the progeny will be denied with a suspension of the principle of *jus sanguinis*.¹⁰

¹⁰ In other words, the mother must return to the host country to give birth in order to obtain host country citizenship for her child when only the principle of *jus solis* applies when a host country's dual citizen parents have a child whilst living abroad.

4. Comparative empirical evidence from Europe and North America under the Human Capital Model of Citizenship Ascension

The acquisition of citizenship by immigrants has economic implications for three major parties: naturalized immigrants themselves, their countries of origin and the host countries. These economic considerations may vary across countries of origin and destination but also depend on the human capital and socio-demographic characteristics of migrants such as their level of education or gender, and different combinations of the three parties involved.

Naturalized migrants

In a now famous essay by Barry Chiswick he claimed that there was no positive economic impact accruing to naturalized immigrants in the United States from ascending to citizenship in the 1970's.¹¹ By the 21st century this conclusion was proved invalid in a variety of countries such as France, Germany, Sweden, Denmark, Norway, the United States and Canada (see Bevelander and DeVoretz, Bevelander and Pendakur, Bevelander *et al.*, Fougère and Safi, Gathmann and Keller, Pastor and Scoggins, Pendakur and Bevelander, Shierholz, Steinhardt, Sumption and Flamm).¹² However, the core of the controversy remains. While most scholars agree that naturalized immigrants perform better in the labour market than non-naturalized immigrants, there is a lack of consensus in explaining the existence for this economic-citizenship premium. In short does this premium actually arise from citizenship ascension or the acquisition of acquiring human capital to qualify for citizenship or both?

Many of these authors also found it difficult to rationalize the observed economic performance differences across naturalized citizens by countries or origin, the immigrants' entry path and gender. In short, why do women, humanitarian migrants and immigrants from less developed countries often benefit the most from citizenship ascension in a variety of countries including Canada, Denmark, France, Germany, Norway, Sweden, the United States

¹¹ Barry R. Chiswick, 'The effect of Americanization on the earnings of foreign-born men', *Journal of Political Economy* 86, 5, (1978): 897-921.

¹² Pieter Bevelander and Don DeVoretz, eds., *The Economic of Citizenship* (Malmo: Malmo University, 2008); Pieter Bevelander and Ravi Pendakur, 'Citizenship, Co-ethnic Populations, and Employment Probabilities of Immigrants in Sweden', *International Migration and Integration* 13, (2012): 203-222; Pieter Bevelander, Jonas Helgertz, Bernt Bratsberg and Anna Tegunimataka, 'Who becomes a citizen, and what happens next? Naturalization in Denmark, Norway and Sweden', *Delmi Report* 6, (2015); Denis Fougère and Mirna Safi, 'Naturalization and employment of immigrants in France (1968-1999)', *International Journal of Manpower* 30,1-2, (2009): 83-96; Christina Gathmann and Nicolas Keller, 'Returns to Citizenship? Evidence from Germany's Recent Immigration Reforms', IZA DP No. 8064 (2014); Manuel Pastor and Justin Scoggins, 'Citizen Gain. The Economic Benefits of Naturalization for Immigrants and the Economy', *Center for the Study of Immigrant Integration* (2012); Ravi Pendakur and Pieter Bevelander, 'Citizenship, enclaves and earnings: comparing two cool countries', *Citizenship Studies* 18, 3-4, (2014): 384-407; Heidi Shierholz, 'The effects of Citizenship on Family Income and Poverty', EPI Briefing Paper 256 (2010); Max Steinhardt, 'Does citizenship matter? The economic impact of naturalizations in Germany', HWWI Research Paper 3-13 (2008); Madeleine Sumption and Sarah Flamm, 'The Economic Value of Citizenship for Immigrants in the United States', Washington, DC: Migration Policy Institute (2012).

(see, for example, the works by Akbari, Bevelander and Pendakur, Bevelander et al., Fouge're and Safi, Gathmann and Keller, Hayfron, Pastor and Scoggins, Shierholz, and Sumption and Flamm).¹³

The key question in this debate, nevertheless, is whether there exists a self-selection bias among naturalized immigrants or not. In other words, do immigrants who plan to ascend to citizenship in any destination country equip themselves with human capital and other social skills prior to citizenship ascension, which in turn allows them to enjoy the observed citizenship premium? Furthermore, do all immigrants who ascend to citizenship experience an economic premium or is this observed economic gain reserved for a select group of immigrants who arrive with premium social and human capital endowments? And, finally, do country-level immigration policies targeted to selecting immigrants influence the potential citizenship premium for their immigrants?

Bevelander and DeVoretz address these questions for five European and North American countries with different immigrant selection and citizenship-granting procedures - namely, Sweden, Norway, the Netherlands, the United States and Canada.¹⁴ This comparative analysis leads to the conclusion that the design of a country's immigration and citizenship policies influence the degree of economic integration of its potential citizens and, as a result, also the size of the economic premium derived from citizenship ascension.

Three specific ascension rules are cited in the book as the main policy factors affecting the size of the citizenship premium: the length of the waiting period, language requirements and the absence of dual citizenship. While a short waiting period may inhibit the ability of the citizenship candidate to acquire enough human capital to produce a substantial economic premium after naturalization, the opposite can act perversely as those immigrant candidates with a large amount of human capital may leave the host country before the waiting period has expired. Language requirements may also have differing effects on the economic benefits of naturalization: greater required language facility may increase immigrants' economic premium, whereas a more rigorous language requirement can discourage potential candidates to apply and encourage them to leave the host country for another country with lower or no language requirements. Finally, the absence of dual citizenship provisions in the host country (or the immigrant's sending country) will reduce citizenship ascension rates and ultimately the size of the economic premium derived from naturalization. Given the absence of dual citizenship many immigrant couples have only one partner ascend to host country citizenship, which further complicates the naturalization process.

¹³ Ather H. Akbari, 'Immigrant naturalization and its impacts on immigrant labour market performance and treasury', in *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008); Bevelander and Pendakur (n 12); Bevelander et al. (n 12); Fouge're and Safi (n 12); Gathmann and Keller (n 12); John E. Hayfron, 'The economics of Norwegian citizenship', in *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008); Pastor and Scoggins (n 12); Shierholz (n 12); Sumption and Flamm (n 12).

¹⁴ Bevelander and DeVoretz (n 12).

One of the main hypotheses posed by Bevelander and DeVoretz states that potential immigrant citizens will get higher or lower economic benefits from naturalization depending on whether they have been through a double selection process or not. The first selection occurs when immigrants select themselves and make the decision to migrate. Receiving states with policies aiming to attract immigrants with specific profiles make the second selection. These policies are more common in North American and Australia than in Europe. A third selection happens when an immigrant decides to apply for citizenship acquisition and it is granted to him or her. Doubly selected immigrants should have higher human capital endowments, which will provide immigrants with greater benefits from the process of naturalization.

Based on the results obtained in the case studies and depending on the benefits derived from naturalization for migrants, the above-cited countries can be classified in three citizenship benefit categories: high (Canada), moderate (United States) and low (Norway, Netherlands and Sweden). The economic citizenship premium to rank these countries was measured in terms of earnings or employment opportunities. This classification is also illustrative of country-level differences in immigration policies and, in particular, differences in their immigrant selection criteria, as explained above.

For example, DeVoretz and Pivnenko reported significantly positive earning effects derived from naturalization in Canada.¹⁵ However, they conclude that a self-selection bias may have blurred their results in terms of claiming an economic premium owing to citizenship ascension.

Interesting results were reported by Akbari from the American case study: while immigrants from developing countries experienced a positive effect on earnings after naturalization, this effect was not as significant for immigrants from developed countries.¹⁶ Later studies confirm these findings (see, for example, Pastor and Scoggins, Shierholz, Sumption and Flamm).¹⁷

The Netherlands, Norway and Sweden were included in the low economic premium group of countries as reported by Bevelander and DeVoretz.¹⁸ After controlling for human capital and sociodemographic factors, no citizenship premium was found for immigrants to these countries, with the exception of refugees to Norway (see Hayfron, Scott, Bevelander and Veenman).¹⁹ Note, however, that in a later study, Bevelander and Pendakur (2012) found that citizenship acquisition has a positive impact on employment for a number of immigrant groups living in Sweden; in particular, for non-EU/non-North American immigrants.

¹⁵ DeVoretz and Pivnenko (n 8).

¹⁶ Akbari (n 13).

¹⁷ Pastor and Scoggins (n 12); Shierholz (n 12); Sumption and Flamm (n 12).

¹⁸ Bevelander and DeVoretz (n 12).

¹⁹ Hayfron (n 13); Kirk Scott, 'The economics of citizenship: is there a naturalization effect', in *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008); Pieter Bevelander and Justus Veenman, 'Naturalization and socioeconomic integration: the case of the Netherlands', in *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008).

Moreover, refugees were reported to experience substantial gains from citizenship acquisition. These results were confirmed and extended by the same scholars in a study that compared the citizenship effect on the earnings of immigrants to Canada and Sweden (see Pendakur and Bevelander).²⁰ Finally, in a recent study by Bevelander *et al.*, which compared the effect of naturalization on immigrants' employment and income outcomes in Denmark, Norway and Sweden, a positive correlation was found between naturalization and a better economic performance among people from countries generally marked by having poor labor market integration.²¹ Only in a few cases, however, was this improved labor market outcome directly linked to the time of naturalization.

Studies conducted in France and Germany confirm most of the findings reported from the countries cited above. Fougère and Safi (2009) found that the acquisition of French nationality has a significant positive relationship on the naturalized immigrants' subsequent employability; and that this is particularly true for groups of immigrants who have a low probability of employment in the host country. Steinhardt (2008) reveals the existence of strong self-selection within the immigrant workforce concerning the naturalization decision in Germany. However, these estimates still show a wage premium earned by naturalized German immigrants, with the impact being larger for non-EU immigrants. Gathmann and Keller (2014) question whether a more liberal access to citizenship resulting from two major citizenship ascension reforms in Germany improved the economic integration of immigrants²². Their estimates show a positive correlation between naturalization and labor market performance, with the returns of citizenship being more substantial for women and recent immigrants than for men and traditional guest workers. The authors conclude that while the liberalization of citizenship provides some benefits in the labor market, it is unlikely to result in full economic and social integration of immigrants to Germany.

In sum, all these studies provide similar conclusions. Naturalized immigrants have higher human capital endowments than their counterparts and this explains their higher employment rates and income. Furthermore, even after controlling for human capital and socio-demographic factors, there exists a separate citizenship effect for naturalized immigrants' labour market incomes in the majority of country case studies reported. This effect seems to be larger for immigrants from low-income countries, refugees and for women, and for immigrants naturalized in countries where they are doubly selected. However, due to the possible existence of endogeneity between naturalization and greater human capital acquisition it is difficult to establish causality. For example, Sumption and Flamm note that despite the potential economic and other benefits of citizenship, far fewer immigrants naturalize than are eligible to do so.²³ They report that immigrants are more likely to naturalize if they have high levels of education, speak English well, and have been in the United States for a long time. Moreover, due to data limitations, the reported studies were

²⁰ Pendakur and Bevelander (n 12).

²¹ Bevelander et al. (n 12).

²² Between 1991 and 1999, adolescents could obtain citizenship after eight years of residency in Germany, while adults faced a 15-year residency requirement. Since 2000, all immigrants face an 8-year residency requirement.

²³ Sumption and Flamm (n 12).

unable to control for unobservable characteristics that affect both citizenship and economic progress such as inherent skills, perseverance or personal connections. Thus, we conclude that qualitative studies are needed to control for the role of current unobservable characteristics and economic outcomes of naturalized immigrants.

The studies cited above focus on the potential economic premium earned by naturalized immigrants through the improvement of their labour market performance. However, naturalized immigrants may also benefit from public services provided to citizens but not to permanent residents in certain countries. This is, for example, the case in countries like Canada where university fees are lower for their citizens.

There are also some costs borne by the prospective citizen which may inhibit naturalization. In chronological order the first step for prospective citizen's is generally further investment in languages courses and other college or university courses to raise their professional standards and to pass often rigorous host country credential exams. Second, they may have to pay for the application fees for naturalization. These fees range from zero euros in France to 1,005 GBP in the United Kingdom. Finally, whereas in some countries such as the ones mentioned above naturalized immigrants may have tax benefits, in others naturalization may have negative tax implications for them. For example in case of the United States, whose citizens but not their permanent residents are taxed on their worldwide income, dual citizenship status constitutes a clear example of these negative tax implications.

Among the direct and indirect costs associated with ascending to citizenship, Bevelander and DeVoretz highlight the absence of dual citizenship provisions in the host or sending country and the potential lost productivity and income absorbed by the immigrant during the waiting period before citizenship ascension.²⁴ Loss of citizenship in the sending country when either or both countries deny "dual citizenship" is a large opportunity cost for some citizenship candidates who intend to return home to either work or retire. According to these authors, the loss of home country citizenship implies: limited access to their home country's labor market; a potential loss of the right to hold land, or the requirement to pay higher land taxes; the loss of entitlement to home country public services, such as subsidized education for their children; and the loss of entitlement to participate in the political process in the source country.

Emerging Economic-Citizenship Issues in Countries of naturalization.

Pastor and Scoggins also asked about the economic impact on the overall host country's economy, from the hypothetical naturalization of immigrants who were eligible to do so in the US.²⁵ In other words, they are measuring the opportunity cost of having a low level of naturalization in the US. By using the mid-point between lower-bound and upper-bound estimates of gains and by setting a goal of shrinking the number of the eligible non-naturalized by half over five years, they estimated an earnings' boost of nearly \$40 billion to

²⁴ Bevelander and DeVoretz (n 12).

²⁵ Pastor and Scoggins (n 12).

the US economy over the next decade. They also concluded that the impact on GDP can be even larger once the secondary effects of higher incomes on spending and demand are taken into account.

The last question asked by these scholars, based on their results, is why immigrants and policy makers do not pursue this citizenship premium. They argue that low host country language proficiency, a lack of knowledge about the application process, and the relatively high application fees discourage immigrants from applying for citizenship. These ideas coincide with Sumption and Flamm's conclusions.²⁶ Finally, Pastor and Scoggins also claim that the US government could help by streamlining the process and considering reductions in application fees and other indirect costs.²⁷

As for citizenship acquisition costs from the state's perspective, these authors explain that naturalization involves a onetime expense in terms of processing the potential naturalized citizen for security clearance as well as administering the citizenship examination and validating other papers such as country of origin and entry date into the host country²⁸. The host country's government will also have more citizens to protect and provide services for in certain situations such as the ones caused by natural disasters abroad. On a more symbolic level, these now naturalized outsiders may challenge the limits of the 'imagined' contours of the national political community.

Some other negative economic effects are more subtle and require a more detailed discussion. In fact, citizenship ascension can be motivated by and produce third country effects. For example, in either North America under the NAFTA agreement or in the European Union ascension to citizenship in a member country allows heretofore uni-state immigrants a legal opportunity to move from their original host country to a third country to exploit their economic and social skills.

An economist would never view these third party effects as sub-optimal since any migration that increases the productivity of international immigrants is a positive outcome. Witness the multitude of recent Chinese born Canadians working successively in the United States courtesy of now holding a Canadian passport.²⁹ However, the immigrant host country may dislike these induced third party movements, especially if immigrant citizenship acquisition yields a passport with greater mobility provisions and if the prior accumulation of subsidized human capital in the host country facilitated their third country movement. This third country presence of naturalized dual citizens also implies the existence of an infinite chain of naturalized progeny of a dual citizen couple living abroad. Thus countries have limited the

²⁶ Sumption and Flamm (n 12).

²⁷ Pastor and Scoggins (n 12).

²⁸ Note that these costs may vary depending on the country of naturalization and that, more importantly, will not always be assumed by the host country (this is, for example, the case of France) but they may also be fully or partially paid by the applicant immigrant (like in the UK, US or Netherlands).

²⁹ Under the NAFTA agreement naturalized Canadians (or Americans) can work in the United States (or Canada) in 67 professions without having to obtain a visa.

prospect of the progeny of naturalized dual citizens from gaining citizenship under the principle of *jus sanguinis* leaving these progeny stateless.³⁰

These above examples of potential economic loss to the host country caused by the onward mobility of newly created dual citizens must be compared to the magnitude of economic gains derived when the recently naturalized remain economically active in their host country. A successful host country naturalization policy would maximize the net economic gains not only to recently naturalized immigrants but to resident citizens in the host country. The most precise way to measure the economic benefit to host country residents is to calculate the recently naturalized immigrants' net contribution to the treasury over their lifetime in the host country. If the average lifetime treasury transfer by any naturalized immigrant cohort is positive, then, from an economic point of view, the naturalization policy in place for that cohort was optimal. If not, then the two core criteria for citizenship ascension, namely time in residence and immigrant selection must be changed.

Issues in Countries of origin

An understudied aspect of the economic implications of immigrants' naturalization is the effect of host country naturalization on the immigrant sending countries' economies. Some of the benefits resulting from migrants' citizenship ascension - and the resulting better economic situation of these naturalized citizens for their countries of origin include remittances, investment in property or a business, the building of a retirement house, donations to their communities, *etc.* However, the opposite could also be stated: the act of ascending to citizenship could be part of a settlement process in the host country, to which the new citizens may feel more committed towards. As a result of this shift in migrants' attachment from the origin to the destination country, the frequency of their contacts, visits and investments in their country of origin may also decrease over time. These two possible scenarios are not only influenced by time elapsed since migration but also by other factors such as the civil status of migrants in both countries, whether they have children and where the children live, whether the immigrant parents are still alive and where they live. Migrant sending countries such as China, which do not recognize dual citizenship, often economically penalize their third country-naturalized citizens reducing their incentive to return.³¹ Other countries such as India, which also does not recognize dual citizenship, have flexible admission and residency policies for heretofore-Indian citizens.³²

From a wider view of migration, citizenship ascension and the world productivity, naturalization may, at the same time, benefit both sending and destination countries. Let's take for example the case of naturalized Gujarati immigrants to California or Canada. The

³⁰ For example Canada does not allow the progeny of naturalized Canadians born abroad from obtaining Canadian citizenship. However, progeny of Canadian-born couples born abroad are considered Canadian citizens.

³¹ For example, working visas are required for working age dual citizens while the dependents of these dual citizens are charged substantial school fees.

³² India allows a form of dual citizenship such that naturalized Indian citizens abroad can return to India to work. However, they cannot be politically active and run for office or vote in Indian elections.

fact that India has instituted a modified form of dual citizenship recognition results in two citizenship ascension premiums. First, Gujarati immigrant entrepreneurs and engineers will ascend to United States or Canadian citizenship faster and at a greater rate with the impending loss of Indian citizenship removed which in turn lowers the cost of host country citizenship acquisition. Beyond this lower cost of host country immigrant citizenship ascension is the prospect of naturalized Indo-Canadians or Indo-Americans working and investing in India.

One of the major potential costs absorbed by sending countries - namely the loss of their citizens and, as a result, sometimes of tax-payers - are linked to the non-recognition of dual citizenship by either the sending or host country. However, this is not a commonly found scenario because of two reasons: (i) most sending countries are low-income countries that do not recognize dual citizenship with the important exception of China and (ii) naturalization countries that in theory do not accept it, in practice do not tend to prosecute their dual citizens.

6. Some conclusions

In this chapter we have reflected on the potential economic implications of citizenship acquisition for the three major parties affected by this act, namely, naturalized immigrants themselves, their countries of origin and the countries of naturalization based on the human capital model for citizenship ascension. We have claimed that earlier approaches such as the economic theory of clubs lacks the complexity to fully address this topic. This chapter reports recent developments for the human capital model of citizenship acquisition. This expanded model now allows a more complete analysis of net tax transfers between three groups: immigrants, naturalized citizens and the native-born. In addition, the human capital model has been expanded to incorporate new analytical challenges to the economic analysis of citizenship including the effects derived from the presence of dual citizenship and free trade zones. The economic costs and benefits of citizenship acquisition were also discussed from the viewpoints of naturalized immigrants, and their sending and host countries. Finally, the economic impacts have been illustrated by empirical studies conducted in North America and Europe. These studies demonstrate that the costs and benefits of naturalization vary depending on the immigrant's characteristics, the level of development in the immigrant's origin country. In addition, the immigrant selection and naturalization policies in host countries, along with the waiting time for naturalization are the most relevant factors in determining the size of the citizenship premium.

We have stated that the vast majority of the studies on immigrants' naturalization focus on the labour market impact of citizenship ascension for the naturalized immigrant and the subsequent fiscal impacts derived from naturalization. However, some other topics such as the effect of naturalization on sending economies have received little or no attention.

Below we present a research agenda based on the observed gaps and limitations we found while creating this review.

How could we work around the self-selection bias to assess the independent citizenship effect? Since the prospect of reaping economic benefits from naturalization entices immigrants to accumulate human capital prior to naturalization, control experiments must be conducted to detect the “pure” economic effect owing to citizenship ascension. One test that could be conducted across countries is to detect the differential rates of citizenship ascension and the resulting income effects for immigrants who accumulate similar amounts of capital but may or may not ascend to citizenship.

Further ideas to analyze the effect of naturalization on host country’s economy. There are numerous secondary economic effects that can impact the economic outcomes of host country born citizens. These economy wide impacts on unemployment, wage rates, income levels for the host’s country born citizens can be detected *via* counterfactual experiments. For example, what would happen to these cited economic effects if all undocumented US residents gained citizenship? Would the effects differ if different groups such as those under age 30, or skilled workers or the full-time employed were granted citizenship rights? Obviously different counterfactual questions of a similar nature can be posed for other issues depending on the immigrant host country’s economic concerns.

How could we analyze the effect of naturalization on the sending country’s economy? This is a difficult question to answer since there exist few data sets to trace the origins and ultimate residency of host country naturalized citizens. To wit, China does not recognize any naturalized Chinese born people who now work or invest in China. These naturalized Chinese Canadians or Chinese Americans are recorded in China as Canadians or Americans working or living in China. Thus, small scale and specific studies must be conducted which can clearly identify the birth place and ultimate citizenship of the return migrant. One area is promising, namely trace the flows of naturalized citizen’s human capital to their host countries. This has already been done on a limited scale since the physical place of where the first and subsequent degrees are earned can identify the origin country of a returned naturalized citizen.

What factors condition a clear path to citizenship for individual host countries and specific groups of immigrants? Some countries have multiple paths to citizenship for different immigrant resident groups. A straightforward test would be to run controlled experiments across these multiple paths to observe possible differential rates of ascension and economic impacts owing to citizenship ascension.

We end with a cautionary note on any economic analysis of citizenship ascension. Naturalization allows immigrants to not only enjoy formal rights and protections through the legal status of citizenship, but it allows immigrants to become members of a national political community through citizenship status. It also allows naturalized migrants to have access to certain job opportunities restricted to host country citizens, freer movement between host country and third countries, accelerated rights to family unification, etc. On top of these rather obvious and measurable benefits of naturalization, citizenship acquisition may also be a “natural” consequence of an immigrant’s integration process and a shift in their sense of belonging from their country of origin towards their destination country. Therefore, we

should state that naturalization does not always need to be a rational economic choice but it could also be an expression of more subjective identity and appreciation of legal and social institutions in the host country. Thus naturalization may still occur when there are no clear economic benefits for the naturalized immigrant. However, the economic benefits derived from citizenship ascension can often be the force that entices the hesitant immigrant to become a citizen.

References

- Akbari, Ather H. 'Immigrant naturalization and its impacts on immigrant labour market performance and treasury'. In *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008).
- Becker, Gary, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1973).
- Bevelander, Pieter and Don DeVoretz, eds., *The Economic of Citizenship* (Malmo: Malmo University, 2008).
- Bevelander, Pieter and Ravi Pendakur. 'Citizenship, Co-ethnic Populations, and Employment Probabilities of Immigrants in Sweden'. *International Migration and Integration* 13 (2012):203–222.
- Bevelander, Pieter and Justus Veenman. 'Naturalization and socioeconomic integration: the case of the netherlands'. In *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008).
- Bevelander, Pieter, Jonas Helgertz, Bernt Bratsberg and Anna Tegunimataka, 'Who becomes a citizen, and what happens next? Naturalization in Denmark, Norway and Sweden'. *Delmi Report* 6 (2015).
https://www.google.se/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0ahUKEwit uqKylcJNAhXLJSwKHaffCL4QFgghMAE&url=http%3A%2F%2Fwww.delmi.se%2Fupl%2Ffiles%2F120588.pdf&usg=AFQjCNHgk7Z9BR-FHmGB00oEMqfleY06nw&sig2=v0ACHUj7ilt_j48p70GXNA
- Buchanan, James M., 'An Economic Theory of Clubs'. *Economica* 32, 125 (1965): 1-14.
- Chiswick, Barry R. 'The effect of Americanization on the earnings of foreign-born men'. *Journal of Political Economy* 86 (5): 897-921.
- DeVoretz, Don and Sergy Pivnenko. 'The economic determinants and consequences of canadian citizenship ascension'. In *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008).
- Fouge`re, Denis and Mirna Safi, 'Naturalization and employment of immigrants in France (1968-1999)'. *International Journal of Manpower* 30, 1-2 (2009): 83-96.
- Frey, Bruno, 'Flexible citizenship for a global society'. *Politics, Philosophy & Economics* 2, 1 (2003): 93-114.
- Gathmann, Christina and Nicolas Keller, 'Returns to Citizenship? Evidence from Germany's Recent Immigration Reforms', IZA DP No. 8064 (2014). <http://ftp.iza.org/dp8064.pdf>

- Hayfron, John E. 'The economics of Norwegian citizenship'. In *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008).
- Joppke, Christian, *Citizenship and Immigration*, (Cambridge: Polity Press, 2010).
- Pastor, Manuel and Justin Scoggins, 'Citizen Gain. The Economic Benefits of Naturalization for Immigrants and the Economy', *Center for the Study of Immigrant Integration* (2012). http://dornsife.usc.edu/assets/sites/731/docs/citizen_gain_web.pdf
- Pendakur, Ravi and Pieter Bevelander, 'Citizenship, enclaves and earnings: comparing two cool countries'. *Citizenship Studies* 18, 3-4 (2014): 384-407.
- Samuelson, Paul A., 'The Pure Theory of Public Expenditures'. *Review of Economics and Statistics* 36, 4 (1954): 387-89.
- Ruhs, Martin and Philip Martin, 'Numbers vs. Rights: Trade-Offs and Guest Worker Programs'. *The International Migration Review* 42, 1 (2008): 249-265.
- Scott, Kirk. 'The economics of citizenship: is there a naturalization effect'. In *The Economic of Citizenship*, edited by Pieter Bevelander and Don DeVoretz (Malmo: Malmo University, 2008).
- Shierholz, Heidi, 'The effects of Citizenship on Family Income and Poverty'. EPI Briefing Paper 256 (2010). <http://www.epi.org/publication/bp256/>
- Steinhardt, Max, 'Does citizenship matter? The economic impact of naturalizations in Germany'. HWWI Research Paper 3-13 (2008). http://hwwi.org/uploads/tx_wilpubdb/HWWI_Research_Paper_3-13.pdf
- Sumption, Madeleine and Sarah Flamm, 'The Economic Value of Citizenship for Immigrants in the United States'. Washington, DC: Migration Policy Institute (2012). <http://www.migrationpolicy.org/research/economic-value-citizenship>
- Tiebout, Charles M., 'A Pure Theory of Local Expenditures'. *Journal of Political Economy* 64, 5 (1956): 416-424.