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DOES IMMIGRATION IMPACT ECONOMIC FREEDOM?

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Does Immigration Impact Economic Freedom?

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ABSTRACT: The economics literature generally finds a positive, but small, gain in income to native-born populations from immigrants and potentially large gains in world incomes. But immigrants can also impact a recipient nation's institutions. A growing empirical literature supports the importance of strong private property rights, a rule of law, and an environment of economic freedom for promoting long run prosperity. Comparatively little work has tried to explain economic freedom as a dependent variable. This paper empirically examines how immigration impacts a region's policies and institutions. We find small but positive increases in institutional quality as a result of immigration.

JEL Codes: J1, J6, P1

Key Words: Economic Freedom, Immigration, Institutions

I. Introduction

The theory that international trade in goods and services increases efficiency and the long-run wealth of a nation is one of the most established in economics. However, the basic analytical idea driving the theory, comparative advantage, applies equally to international trade in labor as it does in goods and services (Freeman, 2006). But international trade in labor, immigration or emigration, differs in one important way from goods and services trade: Goods and services that move across borders cannot vote, protest, riot, or otherwise impact the public policies of the countries they move to but immigrants can.

Institutions are an important fundamental cause of economic development (Rodrik, Subramanian and Trebbi: 2004). As Adam Smith (Canaan, 1904) reportedly wrote, "Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice: all the rest being brought about by the natural course of things."

A growing empirical literature supports the importance of strong private property rights, a rule of law, and an environment of economic freedom for promoting long run growth (DeHaan et al., 2006). While the literature on the impact of economic freedom on various social and economic outcomes is quite large (Hall and Lawson, 2013), comparatively little work has tried to explain economic freedom as a dependent variable.

Thus, a question of growing importance is: What causes policies and institutions consistent with economic freedom to develop?

There is some evidence that economic freedom is enhanced by fiscal decentralization (Cassette and Paty, 2010), more educated politicians (Dreher, et al., 2009), and by the competitiveness of the political environment (Leonida, Patti and Navarra, 2007). Djankov, et al. (2003a), Djankov et al., (2003b), and Bjornskov (2010) examined the determinants of legal institutions consistent with the economic freedom. Finally, LaPorta et al. (1999) looked the determinants of various other aspects of economic freedom such as marginal tax rates and government fiscal size and scope. This paper empirically examines how immigration impacts a region's policies and institutions. Do immigrants positively or negatively impact a country's economic freedom?

There is an enormous literature that investigates the impact of immigration on the welfare of the native born population. Kerr and Kerr's (2011) recent survey, like prior surveys (Friedberg and Hunt, 1995), acknowledges conflicting empirical results in the literature, but finds the general consensus is that current levels of immigration bring small but positive increases in the overall income of the native born in recipient countries. There is some evidence of a negative impact on the least-skilled native-born workers who are direct substitutes for low-skilled immigrants but even in these cases the empirical magnitude is small (Kerr and Kerr, 2011). Regardless, the economic gains to the world economy, and the immigrants themselves, can be quite large (Clemens, 2011).

Despite this literature studying the economic impact of immigrants on recipient countries very little research has focused on how immigration can impact the institutional

environment of recipient countries. Yet, the economic impact on the welfare of the native born of any change in the institutional environment caused by immigration could easily dwarf any gains from trade in the international trade of labor.

What research has been conducted on the impact of immigration, or racial/ethnic heterogeneity more generally, has usually focused on the impact on the welfare state or provision of public goods. In each case, there are competing theoretical hypotheses and/or interpretations of the empirical studies of how immigration would impact economic freedom on these margins.

Welfare and other public assistance programs are typically more generous in recipient nations than immigrants' homelands. Borjas (1999) and others have argued that these welfare benefits can be magnets that attract immigrants. The obvious question is how might immigrants impact levels of taxation and the welfare and social spending programs of the recipient nations.¹ Immigrants tend to have incomes below the median resident of developed countries. One hypothesis is that redistributionist policies in recipient nations will grow because immigrants will constitute a voting block (or social pressure group if not allowed to vote) that agitates for higher taxes and greater redistribution. An alternative hypothesis is that welfare states will shrink because the native born population will be less willing to have a large welfare state once many of the benefits are going to immigrants rather than the native-born population.

Alesina and Glaeser (2004) argue that fractionalization and ethnic heterogeneity are the main reasons that the United States has a smaller welfare state than most Western European countries. The clear implication for this research is that if immigration leads to greater heterogeneity it should shrink welfare states. Razin, Sadka, and Swagel (2002)

provide a median voter model that relies on relative income position, rather than ethnic fractionalization, to predict that native-born tax payers will shift their preferences away from high-tax high-benefits more than immigrants who join the pro-tax pro-benefits coalition at the bottom of the income distribution. They study 11 European countries from 1974 to 1992 and find that a higher share of low-education immigrants in the population leads to lower social transfers and lower rates of taxation on labor.

However, other scholarship disputes whether immigration reduces the size of the welfare state. Banting and Kymlicka (2006) point out that most of the evidence on fractionalization comes from sub-Saharan Africa and the United States. In the United States much of the fractionalization comes from African Americans whose ancestors were brought here as slaves rather than voluntary immigrants and in sub-Saharan Africa states are often very fragile. They argue that it is a mistake to extrapolate too much about the impact of voluntary immigration on welfare states as a result of this research.

Increased demand for public education is another way in which immigration might increase the size of government. Greer (1972), Everheart (1977), Butts (1978), Meyer et al. (1979), Ralph and Ruberson (1980), and Bowles and Gintis (2011) all argue that immigration to the United States caused greater demand for public education, particularly from native-born Protestants, who wanted public schools to assimilate immigrant groups that came from Catholic backgrounds.

There is literature in sociology that finds that immigration increases people's perception of greater risk of unemployment (despite the consensus of the economics literature that there is no such effect) and that people favor a more generous social safety net as a result (Kunovich, 2004; Svallfors, 1997; Ervasti and Hjerm, 2012; Finseraas, 2008;

Burgoon, Koster, and van Egmond ,2012).² Brady and Finnigan (2013) is the most comprehensive and recent of these. They study the effect of both the stock and the flow of immigrants on six measures of the population's views of the welfare state from 1996 to 2006. Their evidence fails to support the view that immigrants make the native born more hostile to the welfare state and provides some evidence in support of the view that immigration makes the native born desire the government to provide a more generous social safety net.

Ethnic fragmentation may impact governance institutions other than welfare state spending. Easterly and Levine (1997) find a negative relationship across countries between ethnic diversity and the amounts and qualities of government-provided goods such as schooling, electricity, roads, and telephones. Similarly Alesina, Baqir, and Easterly (1999) find a negative correlation in U.S. cities, metropolitan areas, and counties between ethnic fragmentation and shares of spending government provided goods such as trash pick-up, roads, sewers, and education. These findings could be interpreted as support for the view that the size of government will be smaller (and economic freedom higher) when there is greater fractionalization but they could also be interpreted to say that the public goods of the rule of law and security of property rights will be lower (and thus economic freedom lower) when there is greater fragmentation.³

Potentially the largest impact that immigrants could have on the well-being of the native-born populations of recipient countries is through their impact on countries' institutional environments. This paper is the first to empirically examine the impact of immigration on a broad measure of economic freedom that has been shown to be

associated with improved economic outcomes. The next section describes our data and methodology. Section III contains our results. The final section concludes.

II. Data and Methodology

Our main institutional measure is Gwartney, Lawson, and Hall's (2013) *Economic Freedom of the World Annual Report* (EFW). The EFW index measures the consistency of a nation's policies and institutions with economic freedom. The report incorporates 43 variables across five broad areas: Size of Government; Legal Structure and Property Rights; Access to Sound Money; Freedom to Trade Internationally; and Regulation of Credit, Labor, and Business. At its most basic level, the EFW index measures the extent to which individuals and private groups are free to buy, sell, trade, invest, and take risks without interference by the state. To score high on the EFW index, a nation must keep taxes and spending low, protect private property rights, maintain stable money, keep the borders open to trade and investment, and exercise regulatory restraint in the marketplace. Area 1 of the economic freedom index, Size of Government, is of particular interest since it relates directly to the literature debating the impact of immigrants on the welfare state. As a robustness check we also use an alternative measure of economic freedom, the *Index of Economic Freedom* (IEF) by The Heritage Institute and The Wall Street Journal (Miller, Kim, and Holmes 2014).

Our data on immigrant stock comes from the United Nation's *International Migrant Stock by Destination and Origin* data series (World Bank 2013). The stock of immigrants, expressed as a share of the population, is the main variable of interest. The percent of immigrants in the population varied from a low of 0.03% in China to a high of 76.96% in Kuwait. The stock of immigrants from OECD and non-OECD countries was also used in

order to see if immigrants from poorer countries impact economic freedom differently than immigrants from richer countries. Finally, we used the net inflow of immigrants during the period as an additional way of measuring the scale of immigration.

Our objective is to determine how immigration, expressed as a share of the population in 1990, impacts the level of economic freedom in that region in 2011. In all regressions, we control for a region's initial level of economic freedom in 1990 in order to control for various long-run historical, cultural, economic, and other factors that influence a region's level of freedom. Table 1 contains descriptive statistics of our international data.

Immigration may impact the degree of economic freedom granted by state or regional governments differently than it impacts the freedom at the national level. *The Economic Freedom of North America* index rates the economic freedom level of the 50 U.S. states and 10 Canadian provinces/territories (Stansel and McMahon: 2013). As a robustness test we also use the Mercatus Center's *Freedom in the 50 States* to measure how immigration impacts freedom at the state level (Ruger and Sorens, 2013).

In a manner similar to that described above, we examine the impact of immigration on 60 sub-national units in the U.S. and Canada and then separately for just the 50 U.S. states. Differences in freedom across U.S. states and Canadian provinces are much smaller than differences in freedom across countries so we assign less importance to these results. Table 9 provides the descriptive statistics for the variables used in the sub-national jurisdiction analysis.

III. Results

Table 2 reports our core results for a cross-section of 110 countries. As expected, the level of economic freedom in 1990 is highly correlated with the level in 2011. Our main

finding is that a larger percentage of immigrants in the population in 1990 is associated with a slightly higher level of economic freedom in 2011. Specifically in the first regression, we find that a 12 percentage point higher immigrant stock in 1990 (about one standard deviation) is associated with a 0.136 unit higher score in economic freedom in 2011 (about 1/7th of a standard deviation). The impact of OECD and non-OECD immigrant shares was positive, though the coefficient was significant only for non-OECD immigrants (Regression 2). Finally, the inflow of immigrants during the period appears not to influence economic freedom at the end of the period, and the inclusion of the immigration inflow variable causes the immigration stock variable to lose statistical significance (Regressions 3 and 4).

Table 3 repeats the estimations found in Table 2 using a two-period panel instead of a simple cross section, thus the sample size doubles from 110 to 220. The periods used were 1990-2001 and 2000-2011. As before, the EFW level at the beginning of the period was used as a control. The results shown in Table 3 reinforce those found in Table 2 though the immigration inflow variable in Regression 3 and the Immigration stock variable in Regression 4 are now statistically significant. Appendix Tables 1 and 2 report the single decade results.

The results presented in Tables 2 and 3 support the notion that greater immigration stocks in 1990 yielded modest improvements in economic freedom over the ensuing 21-year period. Although the effect is relatively small, it is clearly positive. There is no evidence in this sample over this period that greater immigration corresponds to declines in economic freedom.

Tables 4-8 repeat the estimation process at the EFW Area level. In each case we find that immigrants from non-OECD countries are driving the statistical significance. The initial

1990 levels of freedom in Size of Government, Legal Structure and Property Rights, and Regulation of Credit, Labor, and Business were all statistically significant predictors of their 2011 values and the initial value of other areas of economic freedom were also sometimes significant.

Freedom in Area 1 (Size of Government), was 0.216 points higher in 2011 (indicating a smaller government) when there was a 12 percentage point higher share of immigrants in the population in 1990 (see Table 4, Regression 1). This finding suggests that even if welfare is a “magnet” (Borjas 1999), the impact of attracting immigrants to the magnet may end up shrinking the size of the magnet. This finding is consistent with the view that the native-born population desires a smaller welfare state when there is a larger number of immigrants in the economy (Alesina and Glaeser 2004; Razin, Sadka, and Swagel 2002) and also with the fragmentation literature that finds governments spend a smaller amount on public goods when there is greater ethnic fragmentation (Easterly and Levine 1997; Alesina, Baqir, and Easterly 1999).

We also find that a 12 percentage point higher immigrant share in 1990 is associated with an 0.313 higher score in Area 2 (Legal Structure and Property Rights) in 2011 (see Table 5, Regression 1). This is some indication at least that, even if ethnic fragmentation results in less government spending on some goods, it doesn’t undermine the existence of the public goods of property rights and rule of law.

Tables 6 and 7 indicate that greater immigration appears not related to either the soundness of the monetary regime (Area 3) or to the freedom to trade internationally (Area 4).

Finally, we find that that a 12 percentage point higher immigrant share in 1990 is associated with an 0.230 higher score in Area 5 (Regulation of Credit, Labor, and Business) in 2011 (see Table 8, Regression 1). We are not aware of any prior literature predicting either an increase or a decrease in regulation in response to immigration. However, the evidence does dissuade us of two potential fears of immigration. Immigrants do not appear to bring a desire with them for the highly regulated environment from which they often emigrate. Nor do the native born respond to greater immigration by implementing a more stringent regulatory environment in order to preclude immigrants from participating in the economy.

These results are robust to an alternative measure of economic freedom, the *Index of Economic Freedom* (IEF) by The Heritage Institute and The Wall Street Journal (Miller, Kim, and Holmes 2014). Because of data limitations, we only look at the period from 2000-2011 with this dataset. The coefficient on immigrant share is positive, though not statistically significant. In the second specification, immigration from OECD countries is statistically significant with a very large coefficient, while non-OECD countries are positive but insignificant. It is worth noting how these results contrast with the Heritage Foundation's traditionally hostile position toward immigration (e.g. Rector and Richwine 2013). See Appendix Table 3 for these results.

Next, we turn our attention to the impact of immigrants on economic freedom at the sub-national level. We used both the subnational score in *Economic Freedom of North America* (EFNA) and the economic freedom component of the Mercatus Center's *Freedom in the Fifty States*. In EFNA model, we compared the value of the index in 1990 with the value of the index in 2011. For Mercatus's index, we compared its value in the first available year

of 2001 with its value in 2011. Immigrants as a percentage of population in Canadian regions were found using Statistics Canada (2006). We report descriptive statistics for each in Table 9.

Table 10 contains the sub-national regression results. Initial values of freedom in 1990 are, again, highly statistically significant and economically meaningful in all regressions. In the baseline (Regression 1) that includes the 50 U.S. states and 10 Canadian regions, the percent of immigrants in the population in 1990 is not statistically significant. However, upon inclusion of a dummy for Canadian provinces (Regression 2), or when the 50 states are examined alone (Regression 3), the percent of immigrants in the population in 1990 has a negative and statistically significant effect on economic freedom in 2011. Using Regression 3, we see that a 5 percentage point higher share of immigrants in the economy (about one standard deviation) leads to a 0.158 lower level of economic freedom at the state level (about 1/5th of a standard deviation). Regression 4 uses the Mercatus measure of economic freedom as an additional robustness check and also finds a negative and statistically significant relationship between immigration and state level freedom.

It is important to keep in mind that economic freedom varies substantially more between nations than it does between U.S. states and Canadian provinces. A one standard deviation difference from the mean level of freedom (countries like Indonesia, Tunisia, Moldova, and Italy) means the difference between living in Cameroon or Ecuador versus Cyprus or Germany. Whereas a one standard deviation difference from the mean state (Minnesota) is the difference between living in Georgia or California. Thus even if freedom does negatively impact the economic freedom of U.S. states that effect is likely more than offset by the positive impact immigration has at the national level. On net, our results

support the view that immigration has a small but positive impact on the freedom of countries receiving immigrants.

IV. Conclusion

It is reasonably well established that immigrants brings small but modest economic benefits to the countries they migrate to. Our results indicate that immigration marginally improves a country's policies and institutions in a manner consistent with economic freedom. Using our estimate that a 12 percentage point higher immigration percentage increases economic freedom by 0.136 points and an estimate for the impact of economic freedom on growth (Gwartney, Holcombe, and Lawson, 2006), our results suggest that a 12 percentage point higher immigrant share will generate a 0.16 percentage point higher long-run annual growth rate. This strikes us as a meaningful, if not large, impact on economic growth.

The usual caveats apply to this study. Although the use of economic freedom at the beginning of the period effectively controls for numerous omitted fixed effects, there may be relevant omitted variables that vary over the time period. Also, it is not obvious what the appropriate time horizon is to investigate the impact of immigration on the receiving countries' institutions. Most of the time, immigrants are not immediately eligible to vote, though they may still influence the political process through other means. Finally, we cannot tell with the data at hand whether any changes in institutional quality are a function of the immigrants themselves or the reactions of the natives to the immigrants.

Overall, we find evidence that greater immigrant shares in the population yield positive impacts on institutional quality at the national level and negative impacts at the

subnational level. The magnitude of the former appears to be larger than the latter and in either case the impact of immigrants on institutional quality is small.

Citations

Alesina, Alberto F., Reza Baqir, and William Easterly. "Public Goods and Ethnic Divisions." *Quarterly Journal of Economics* 114, (1999): 1243-84.

Alesina, Alberto F., and Edward L. Glaeser. *Fighting Poverty in the U.S. and Europe*. New York: Oxford University Press, 2004.

Banting, Keith, and Will Kymlicka. "Introduction: Multiculturalism and the Welfare State: Setting the Context." In *Multiculturalism and the Welfare State*, 1-45. Edited by K. Banting and W. Kymlicka. New York: Oxford University Press, 2006.

Bjornskov, C. 2010. "How Does Social Trust Lead to Better Governance? An Attempt to Separate Electoral and Bureaucratic Mechanisms." *Public Choice*, 144(1-2), 323-46.

Borjas, George J. "Immigration and Welfare Magnets." *Journal of Labor Economics* 17, no. 4 (1999): 607-637.

Bowles, Samuel and Herbert Gintis. *Schooling in Capitalist America: Educational Reforms and the Contradictions of Economic Life*. Chicago: Haymarket Books, 2011.

Brady, David, and Ryan Finnigan. "Does Immigration Undermine Public Support for Social Policy?" *American Sociological Review* 79, no. 1 (2013): 17-42.

Burgoon, Brian, Ferry Koster, and Marcel von Egmond. "Support for Redistribution and the Paradox of Immigration." *Journal of European Social Policy* 22, (2012): 288-304.

Butts, Freeman R. *Public Education in the United States: From Revolution to Reform*. Canada: Holt, Rinehart and Winston, 1978.

Canaan, Edward (ed.) "Editor's Introduction" to Smith, Adam. *An Inquiry in the Nature and Causes of the Wealth of Nations*. London: Methuen & Co., Ltd. (1904 edition, originally published 1776). <http://www.econlib.org/library/Smith/smWN0.html#I.56>

Cassette, A. and S. Paty. 2010. "Fiscal Decentralization and the Size of Government: A European Country Empirical Analysis." *Public Choice*, 143(1-2), 173-89.

Clemens, Michael A. "Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?" *Journal of Economics Perspectives* 25, no. 3 (2011): 83-106.

De Haan, J.; S. Lundstrom and J. E. Sturm. 2006. "Market-Oriented Institutions and Policies and Economic Growth: A Critical Survey." *Journal of Economic Surveys*, 20(2), 157-91.

Dimant, Eugene, Tim Krieger, and Margarete Redlin. "A Crook is a Crook . . . But is He Still a Crook Abroad? On the Effect of Immigration on Destination-Country Corruption." Discussion Paper Series, no. 2013-03. Wilfred-Guth-Stiftungsprofessur fuer Ordnungs- und Wettbewerbspolitik, Universitaet Freiburg, 2013.

Djankov, S.; R. La Porta; F. Lopez-de-Silanes and A. Shleifer. 2003a. "Courts." *Quarterly Journal of Economics*, 118(2), 453-517.

Djankov, S.; C. McLiesh; T. Nenova and A. Shleifer. 2003b. "Who Owns the Media?" *Journal of Law & Economics*, 46(2), 341-81.

Dreher, A.; M. J. Lamla; S. M. Lein and F. Somogyi. 2009. "The Impact of Political Leaders' Profession and Education on Reforms." *Journal of Comparative Economics*, 37(1), 169-93.

Easterly, William, and Ross Levine. "Africa's Growth Tragedy: Policies and Ethnic Divisions," *Quarterly Journal of Economics* 112 (1997): 1203-1250.

Ervasti, Heikki, and Mikael Hjerm. "Immigration, Trust and Support for the Welfare State." In *The Future of the Welfare State*, 153-171. Edited by H. Ervasti, T. Fridberg, J. Goul Andersen, and K. Ringdal. Camberley, UK: Edward Elgar, 2012.

Everheart, Robert B. "From Universalism to Usurpation: An Essay on the Antecedents to Compulsory School Attendance Legislation," *Review of Education Research* 47, no. 3 (1977): 499-530.

Finseraas, Henning. "Immigration and Preferences for Redistribution: An Empirical Analysis of European Social Survey Data." *Comparative European Politics* 6, (2008): 407-431.

Freeman, Richard. "People Flows in Globalization," *Journal of Economic Perspectives* 20, no 2 (2006): 145-170

Friedberg, Rachel M., and Jennifer Hunt. "The Effects of Immigrants on Host Country Wages, Employment and Growth," *Journal of Economic Perspectives* 9, no. 2 (1995): 23-44.

Greer, Colin. *The Great School Legend: A Revisionist Interpretation of American Public Education*. New York: Basic Books, 1972.

Gwartney, James, Randall Holcombe, and Robert Lawson. "Institutions and the Impact of Investment on Growth" *Kyklos* 59, no. 2 (2006): 255-273.

Gwartney, James, Robert Lawson, and Joshua Hall. *Economic Freedom of the World Annual Report*. Vancouver, BC, Canada: Fraser Institute, 2013.

Hall, Joshua and Robert Lawson. 2013. "Economic Freedom of the World: An Accounting of the Literature." *Contemporary Economic Policy*.

Kerr, Sari Pekkala and William R. Kerr. "Economic Impacts of Immigration: A Survey," NBER Working Paper 16736, January 2011.

Kunovich, Robert M. "Social Structural Position and Prejudice: An Exploration of Cross-National Differences in Regression Slopes." *Social Science Research* 33, (2004): 20-44.

Leonida, L.; D. M. A. Patti and P. Navarra. 2007. "Towards an Equilibrium Level of Market Reform: How Politics Affects the Dynamics of Policy Change." *Applied Economics*, 39(13-15), 1627-34.

Meyer, John, David Tyack, Joane Nagel, and Audri Gordon. "Public Education as Nation-Building in America," *American Journal of Sociology* 85, no. 3 (1979): 591-613.

Miller, Terry, Anthony B. Kim, and Kim R. Holmes. *2014 Index of Economic Freedom*. Washington DC: The Heritage Foundation, 2014.

Ralph, John H., and Richard Rubinson. "Immigration and the Expansion of Schooling in the United States, 1890-1970," *American Sociological Review* 45, no. 6 (1980): 943-954.

Razin, Assaf, Efram Sadka, and Phillip Swagel. "Tax Burden and Migration: A Political Economy Theory and Evidence." *Journal of Public Economics* 85, (2002): 167-190.

Rector, Richard and Jason Richwine. *The Fiscal Cost of Unlawful Immigrants and Amnesty to the U.S. Taxpayer. The Heritage Foundation Special Report no. 133, 2013,*
<http://www.heritage.org/research/reports/2013/05/the-fiscal-cost-of-unlawful-immigrants-and-amnesty%20to-the-us-taxpayer>

Rodrik, Dani. "Why Do More Open Economies Have Bigger Governments?" *Journal of Political Economy* 106, no. 5 (1998): 997-1032.

Rodrik, D., A. Subramanian, and F. Trebbi. "Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development," *Journal of Economic Growth* 9, (2004): 131-165.

Ruger, William, and Jason Sorens. *Freedom in the 50 States*. Arlington VA: Mercatus Center, 2013.

Stansel, Dean and Fred McMahon. *Economic Freedom of North America*. Vancouver, BC, Canada: Fraser Institute, 2013.

Statistics Canada. *Place of birth for the immigrant population by period of immigration, 2006 counts and percentage distribution, for Canada, provinces and territories - 20%*

sample data," <http://www12.statcan.ca/census-recensement/2006/dp-pd/hlt/97-557/T404-eng.cfm?SR=1>

Stewart, Dugald. *Account of the Life and Writings of Adam Smith*. Cambridge: Hilliard and Brown, 1829.

Svallfors, Stefan. "Worlds of Welfare and Attitudes to Redistribution: A Comparison of Eight Western Nations." *European Sociological Review* 13 (1997): 283-304.

World Bank. *World Development Indicators*. Washington DC: World Bank. 2013.

TABLE 1. Descriptive statistics of primary data set.

Variable	Obs	Mean	Std. Dev.	Min	Max
Economic Freedom, 1990	110	5.698	1.354	2.69	8.73
Economic Freedom, 2011	110	6.866	0.923	3.93	8.97
Immigrant Stock, 1990	110	0.074	0.123	0.0003	0.770
OECD Immigrant Stock, 1990	110	0.014	0.031	0	0.220
Non-OECD Immigrant Stock, 1990	110	0.060	0.117	0.0003	0.754
Immigrant Net Inflow, 1990-2010	110	0.078	0.336	-0.010	3.327
Area 1: Size of Govt, 2011	109	6.514	1.280	3.640	9.023
Area 1: Size of Govt, 1990	108	5.551	1.520	1.999	9.312
Area 2: Legal System, 2011	109	5.596	1.706	2.154	8.907
Area 2: Legal System, 1990	105	5.311	1.923	1.953	8.347
Area 3: Sound Money, 2011	109	8.122	1.3940	3.222	9.775
Area 3: Sound Money, 1990	109	6.430	2.411	0	9.794
Area 4: Int'l Trade, 2011	109	7.061	1.1809	1.782	9.356
Area 4: Int'l Trade, 1990	107	5.436	2.358	0	9.970
Area 5: Regulation, 2011	109	7.008	1.032	4.345	9.278
Area 5: Regulation, 1990	109	5.691	1.473	1.578	9.430

TABLE 2. Baseline Regression Results

Regression	1	2	3	4
LHS	EFW, 2011	EFW, 2011	EFW, 2011	EFW, 2011
Economic Freedom, 1990	0.371*** (0.055)	0.357*** (0.062)	0.389*** (0.054)	0.371*** (0.056)
Immigrant Stock, 1990	1.130* (0.066)			1.073 (0.775)
OECD Immigrant Stock, 1990		2.484 (2.684)		
Non-OECD Immigrant Stock, 1990		1.067* (0.621)		
Immigrant Net Inflow, 1990-2010			0.270 (0.219)	0.033 (0.277)
Constant	4.666*** (0.311)	4.732*** (0.337)	4.268*** (0.314)	4.670*** (0.314)
Adjusted R ²	0.362	0.357	0.350	0.356
n	110	110	110	110
Years	1990-2011	1990-2011	1990-2011	1990-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

TABLE 3. Panel Data Regression Results

Regression	1	2	3	4
LHS	EFW, <i>t+11</i>	EFW, <i>t+11</i>	EFW, <i>t+11</i>	EFW, <i>t+11</i>
Economic Freedom, <i>t</i>	0.534*** (0.035)	0.515*** (0.038)	0.552*** (0.034)	0.534*** (0.035)
Immigrant Stock, <i>t</i>	1.000*** (0.357)			0.980** (0.358)
OECD Immigrant Stock, <i>t</i>		2.945* (1.562)		
Non-OECD Immigrant Stock, <i>t</i>		0.900** (0.365)		
Immigrant Net Inflow, <i>t</i> to <i>t+10</i>			0.614* (0.348)	0.032 (0.439)
Constant	3.350*** (0.214)	3.444*** (0.226)	3.295*** (0.215)	3.351*** (0.214)
Adjusted R^2	0.572	0.574	0.563	0.570
n	220	220	220	220
Years	1990-2001; 2000-2011	1990-2001; 2000-2011	1990-2001; 2000-2011	1990-2001; 2000-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

TABLE 4. Area 1 Size of Government Regression Results

Regression	1	2	3	4
LHS	EFW, Area 1, 2011	EFW, Area 1, 2011	EFW, Area 1, 2011	EFW, Area 1, 2011
Immigrant Stock, 1990	1.801** (0.857)			1.715 (1.118)
OECD Immigrant Stock, 1990		-2.226 (3.796)		
Non-OECD Immigrant Stock, 1990		1.986** (0.873)		
Net Immigrant Inflow, 1990-2010			0.412 (0.291)	0.045 (0.375)
Area 1: Size of Govt, 1990	0.432*** (0.072)	0.421*** (0.073)	0.404*** (0.073)	0.429*** (0.075)
Area 2: Legal System, 1990	-0.043 (0.071)	-0.022 (0.074)	-0.076 (0.070)	-0.044 (0.072)
Area 3: Sound Money, 1990	-0.043 (0.050)	-0.041 (0.050)	-0.039 (0.051)	-0.041 (0.050)
Area 4: Int'l Trade, 1990	-0.231*** (0.067)	-0.222*** (0.067)	-0.194*** (0.064)	-0.230*** (0.067)
Area 5: Regulation, 1990	0.111 (0.093)	0.129 (0.094)	0.129 (0.094)	0.112 (0.094)
Constant	5.072*** (0.533)	4.916*** (0.551)	5.189*** (0.545)	5.084*** (0.545)
Adjusted R ²	0.445	0.446	0.431	0.439
n	102	102	102	102
Years	1990-2011	1990-2011	1990-2011	1990-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

TABLE 5. Area 2 Legal System and Property Rights Regression Results

Regression	1	2	3	4
LHS	EFW, Area 2, 2011	EFW, Area 2, 2011	EFW, Area 2, 2011	EFW, Area 2, 2011
Immigrant Stock, 1990	2.608*** (0.933)			2.680** (1.218)
OECD Immigrant Stock, 1990		4.486 (4.156)		
Non-OECD Immigrant Stock, 1990		2.522*** (0.955)		
Immigrant Net Inflow, 1990-2010			0.536* (0.321)	-0.038 (0.408)
Area 1: Size of Govt, 1990	-0.223*** (0.079)	-0.218*** (0.080)	-0.261*** (0.305)	-0.222*** (0.081)
Area 2: Legal System, 1990	0.354*** (0.077)	0.345*** (0.081)	0.305*** (0.077)	0.356*** (0.079)
Area 3: Sound Money, 1990	0.010 (0.054)	0.011 (0.054)	0.014 (0.056)	0.011 (0.055)
Area 4: Int'l Trade, 1990	0.152** (0.073)	0.148** (0.073)	0.206*** (0.070)	0.151** (0.073)
Area 5: Regulation, 1990	0.301*** (0.101)	0.293*** (0.103)	0.327*** (0.104)	0.300*** (0.102)
Constant	2.168*** (0.580)	2.240*** (0.603)	2.321*** (0.601)	2.157*** (0.594)
Adjusted R^2	0.630	0.627	0.611	0.626
n	102	102	102	102
Years	1990-2011	1990-2011	1990-2011	1990-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

TABLE 6. Area 3 Sound Money Regression Results

Regression	1	2	3	4
LHS	EFW, Area 3, 2011	EFW, Area 3, 2011	EFW, Area 3, 2011	EFW, Area 3, 2011
Immigrant Stock, 1990	-0.184 (1.085)			-0.558 (1.415)
OECD Immigrant Stock, 1990		3.444 (4.823)		
Non-OECD Immigrant Stock, 1990		-0.350 (1.108)		
Immigrant Net Inflow, 1990-2010			0.077 (0.364)	0.197 (0.475)
Area 1: Size of Govt, 1990	-0.053 (0.092)	-0.044 (0.093)	-0.054 (0.092)	-0.062 (0.095)
Area 2: Legal System, 1990	0.205** (0.090)	0.186** (0.095)	0.209** (0.087)	0.199** (0.091)
Area 3: Sound Money, 1990	-0.013 (0.063)	-0.013 (0.063)	-0.016 (0.063)	-0.015 (0.064)
Area 4: Int'l Trade, 1990	0.169** (0.084)	0.162* (0.085)	0.162** (0.080)	0.173** (0.085)
Area 5: Regulation, 1990	-0.023 (0.118)	-0.040 (0.120)	-0.023 (0.118)	-0.018 (0.119)
Constant	6.663*** (0.675)	6.803*** (0.700)	6.683*** (0.681)	6.717*** (0.689)
Adjusted R^2	0.207	0.204	0.207	0.200
n	102	102	102	102
Years	1990-2011	1990-2011	1990-2011	1990-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

TABLE 7. Area 4 International Trade Regression Results

Regression	1	2	3	4
LHS	EFW, Area 4, 2011	EFW, Area 4, 2011	EFW, Area 4, 2011	EFW, Area 4, 2011
Immigrant Stock, 1990	0.933 (0.791)			0.880 (1.033)
OECD Immigrant Stock, 1990		-1.628 (3.519)		
Non-OECD Immigrant Stock, 1990		1.051 (0.809)		
Immigrant Net Inflow, 1990-2010			0.216 (0.266)	0.028 (0.346)
Area 1: Size of Govt, 1990	0.034 (0.067)	0.028 (0.068)	0.020 (0.067)	0.033 (0.069)
Area 2: Legal System, 1990	0.127* (0.066)	0.141** (0.068)	0.110* (0.064)	0.126* (0.067)
Area 3: Sound Money, 1990	-0.048 (0.046)	-0.048 (0.046)	-0.047 (0.046)	-0.048 (0.046)
Area 4: Int'l Trade, 1990	0.147** (0.062)	0.152** (0.062)	0.165*** (0.058)	0.147** (0.062)
Area 5: Regulation, 1990	0.148* (0.086)	0.160* (0.088)	0.158* (0.086)	0.149* (0.087)
Constant	4.845*** (0.492)	4.746*** (0.511)	4.907*** (0.499)	4.853*** (0.504)
Adjusted R ²	0.325	0.322	0.320	0.320
n	102	102	102	102
Years	1990-2011	1990-2011	1990-2011	1990-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

TABLE 8. Area 5 Regulation Regression Results

Regression	1	2	3	4
LHS	EFW, Area 5, 2011	EFW, Area 5, 2011	EFW, Area 5, 2011	EFW, Area 5, 2011
Immigrant Stock, 1990	1.913*** (0.648)			1.535* (0.844)
OECD Immigrant Stock, 1990		-0.447 (2.879)		
Non-OECD Immigrant Stock, 1990		2.208*** (0.662)		
Immigrant Net Inflow, 1990-2010			0.527** (0.221)	0.199 (0.283)
Area 1: Size of Govt, 1990	-0.091 (0.055)	-0.097* (0.055)	-0.122** (0.056)	-0.100* (0.056)
Area 2: Legal System, 1990	0.146*** (0.054)	0.158*** (0.056)	0.111** (0.053)	0.140** (0.055)
Area 3: Sound Money, 1990	-0.014 (0.038)	-0.014 (0.038)	-0.014 (0.038)	-0.016 (0.038)
Area 4: Int'l Trade, 1990	-0.023 (0.050)	-0.018 (0.051)	0.013 (0.048)	-0.018 (0.051)
Area 5: Regulation, 1990	0.364*** (0.070)	0.375*** (0.072)	0.385*** (0.071)	0.369*** (0.071)
Constant	4.721*** (0.403)	4.630*** (0.418)	4.869*** (0.413)	4.775*** (0.411)
Adjusted R ²	0.469	0.468	0.454	0.467
n	102	102	102	102
Years	1990-2011	1990-2011	1990-2011	1990-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

TABLE 9. Descriptive Statistics of Subnational Indices

Variable	Obs	Mean	Std. Dev.	Min	Max
-----+-----					
Economic Freedom of North America:					
EFNA, 2011	60	6.438	0.798	4.3	7.9
EFNA, 1990	60	6.505	1.063	3.2	8.052
Immigrant Percent	60	0.057	0.057	0.008	0.253
Freedom in the Fifty States:					
Freedom in the Fifty States, 1990	50	3.570	37.944	-133.588	72.761
Freedom in the Fifty States, 1990	50	-0.307	33.875	-112.234	59.821
Immigrant Percent	50	0.0714	0.0568	0.011	0.262

TABLE 10. Regression Results for Subnational Indices

Regression	1	2	3	4
LHS	EFNA, 2011	EFNA, 2011	EFNA, 2011	Freedom in the Fifty States, 2011
Sample	W/Canada	W/Canada	US ONLY	US ONLY
EFNA, 1990	0.519*** (0.071)	0.724*** (0.1034)	0.690*** (0.0899)	
Freedom in the Fifty States, 1990				0.847*** (0.084)
Immigrant Percent	-1.309 (1.372)	-2.288* (1.308)	-3.157** (1.336)	-166.842*** (50.013)
Canada Dummy		0.800** (0.305)		
Constant	3.146*** (0.491)	1.738** (0.712)	2.009*** (0.633)	15.749*** (4.426)
Adjusted R^2	0.503	0.550	0.590	0.761
n	60	60	50	50
Years	1990-2011	1990-2011	1990-2011	2001-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

APPENDIX TABLE 1. Ten Year Effects of Immigration, 1990-2001

Regression	1	2	3	4
LHS	EFW, 2001	EFW, 2001	EFW, 2001	EFW, 2001
Economic Freedom, 1990	0.516*** (0.052)	0.478*** (0.058)	0.537*** (0.053)	0.521*** (0.053)
Immigrant Stock, 1990	0.963* (0.576)			1.222* (0.708)
OECD Immigrant Stock, 1990		4.640* (2.525)		
Non-OECD Immigrant Stock, 1990		0.792 (0.584)		
Immigrant Net Inflow, 1990-2000			0.443 (0.993)	-0.764 (1.207)
Constant	3.550*** (0.295)	3.727*** (0.317)	3.491*** (0.303)	3.518*** (0.301)
Adjusted R ²	0.527	0.534	0.516	0.525
n	110	110	110	110
Years	1990-2001	1990-2001	1990-2001	1990-2001

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

APPENDIX TABLE 2. Ten Year Effects of Immigration, 2000-2011

Regression	1	2	3	4
LHS	EFW, 2011	EFW, 2011	EFW, 2011	EFW, 2011
Economic Freedom, 2000	0.651*** (0.053)	0.661*** (0.058)	0.668*** (0.051)	0.655*** (0.053)
Immigrant Stock, 2000	0.788* (0.428)			0.429 (0.594)
OECD Immigrant Stock, 2000		-0.084 (1.913)		
Non-OECD Immigrant Stock, 2000		0.828* (0.438)		
Immigrant Net Inflow, 2000-2010			0.619* (0.325)	0.394 (0.451)
Constant	2.497*** (0.346)	2.435*** (0.371)	2.418*** (0.377)	2.476*** (0.347)
Adjusted R ²	0.634	0.632	0.635	0.634
n	110	110	110	110
Years	2000-2011	2000-2011	2000-2011	2000-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

APPENDIX TABLE 3. Robustness Check Using Heritage Index of Economic Freedom

Regression	13	14
LHS	Index of Economic Freedom	Index of Economic Freedom
Index of Economic Freedom, 1990	0.801*** (0.047)	0.770*** 0.049
Immigrant Percent	6.030 (4.351)	
OECD Immigrant Percent		48.072** (20.911)
Non-OECD Immigrant Percent		4.471 (4.372)
Constant	13.163*** (2.684)	14.622*** (2.748)
Adjusted R^2	0.694	0.700
n	157	157
Years	2000-2011	2000-2011

*** denotes statistically significant at p=0.01. ** denotes statistically significant at p=0.05. * denotes statistically significant at p=0.10.

¹ A separate and distinct question, on which there is a larger amount of research, is what is the fiscal impact of immigration given current tax and spending policies. On this point there is less consensus than on the impact of immigrants on the employment opportunities and wages of natives. The fiscal impact of immigration varies considerably depending on the country studied, characteristics of the immigrants, and model employed. In general though, if there is a consensus, it is that the net fiscal impact is small. See Kerr and Kerr (2011) for a survey.

² This is consistent with Rodrik (1998) who finds that the more open a country is to international trade the larger government expenditures are as a percent of GDP to mitigate the population's risk from fluctuations in the international market.

³ Dimant et al. (2013) found that immigrants increase corruption in recipient countries when they come from corruption-ridden countries. Our measure of property rights and law is broader than just corruption but contains some components related to corruption.