

Does Mass Immigration Destroy Institutions? 1990s Israel as a Natural Experiment

By Benjamin Powell, J.R. Clark, Alex
Nowrasteh

January 12, 2017

CATO WORKING PAPER

No. 41



Cato Working Papers are intended to circulate research in progress for comment and discussion.

Available at www.cato.org/workingpapers.

Does Mass Immigration Destroy Institutions? 1990s Israel as a Natural Experiment*

Benjamin Powell
Professor of Economics, Rawls College of Business
Director, Free Market Institute
Texas Tech University
Benjamin.powell@ttu.edu

J.R. Clark
Probasco Chair of Free Enterprise
University of Tennessee Chattanooga
J-Clark@utc.edu

Alex Nowrasteh
Immigration Policy Analyst
Cato Institute
anowrasteh@cato.org

ABSTRACT

The relaxation of emigration restrictions in the Soviet Union and the State's subsequent collapse led to a large exogenous shock to Israel's immigrant flows because Israel allows unrestricted immigration for world-wide Jews. Israel's population increased by 20 percent in the 1990s due to immigration from the former Soviet Union. These immigrants did not bring social capital that eroded the quality of Israel's institutional environment. We find that economic institutions improved substantially over the decade. Our synthetic control methodology indicates that it is likely that the institutional improvement would not have occurred to the same degree without the mass migration. Our case study indicates that immigrant participation in the political process is the main mechanism through which the migration caused institutional change.

* We thank Michael Clemens, Peter Lewin, John Alcorn, Eric Crampton and the participants at the Southern Economics Association, Mont Pelerin Society, Cato Immigration conference, and Trinity University seminar for helpful comments on an earlier draft of this paper and Colin Blondin for research assistance. Financial support from the John Templeton Foundation is gratefully acknowledged.

Does Mass Immigration Destroy Institutions? 1990s Israel as a Natural Experiment

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. This paper examines how a mass migration from a former communist country impacted a destination country's institutions by taking advantage of the exogenous shock to immigration flows to Israel created by the fall of the former Soviet Union.

The forecasted economic gains that could be achieved if all of the world's countries eliminated quantitative restrictions on immigration are massive. Estimates range from 50 to 150 percent of world GDP (Clemens 2011). Even a migration of just 5 percent of the world's poor to wealthier countries would boost world GDP by more than could be gained by completely eliminating all remaining trade barriers to goods and services and capital flows (Clemens 2011).

However, immigration could also impact a destination countries' institutions and institutions are an important fundamental cause of economic development (Rodrik, Subramanian and Trebbi 2004). If immigrants from poorer countries import the very social capital that supports institutions that are responsible for poverty in their origin countries, then they could undermine the institutions of destination countries in a way that destroys destination countries'

production functions. This argument is known as the “new economic case for migration restrictions.”

Borjas (2015) begins to develop this argument by asking the question, “What would happen to the institutions and social norms that govern economic exchanges in specific countries after the entry/exit of perhaps hundreds of millions of people” (2015: 961)? In his recent book he succinctly states the problem and the state of our knowledge about it:

As the important work of Acemoglu and Robinson (2012) suggests, "nations fail" mainly because of differences in political and economic institutions. For immigration to generate substantial global gains, it must be the case that billions of immigrants can move to the industrialized economies without importing the "bad" institutions that led to poor economic conditions in the source countries in the first place. It seems inconceivable that the North's infrastructure would remain unchanged after the admission of billions of new workers. Unfortunately, remarkably little is known about the political and cultural impact of immigration on the receiving countries, and about how institutions in these receiving countries would adjust to the influx (2014, p. 169).

Borjas provides a number of simulations showing how varying degrees of importation of bad institutions impacts the projected global gain from unrestricted immigration. He shows that these “general equilibrium effects can easily turn a receiving country’s expected (static) windfall from unrestricted migration into an economic debacle” (2015: 972).

Collier (2013) shares Borjas’ fears. He worries that immigrants might import both institutions and cultural characteristics that are responsible for their poverty. “Migrants are essentially escaping from countries with dysfunctional social models... The cultures -- or norms and narratives -- of poor societies, along with their institutions and organizations, stand suspected of being the primary cause of their poverty” (2013: 34).

Collier offers anecdotes of these impacts in Great Britain but offers no systematic examination of whether the hypothesized negative importation actually occurs. And Borjas' simulations offers no empirical evidence that the negative externality he simulates does, in fact, exist. A handful of papers have begun empirically estimating the impact of immigration on destination country institutions and productivity.

Ortega and Peri (2014) examined a cross-section of countries to estimate how stocks of immigrants impacted incomes and total factor productivity in destination countries. Using a two-stage least-squares instrumental variables approach they find that a 10 percentage-point increase in the immigration stock (approximately a standard deviation) is associated with a doubling of long-run per-capita income. They find that the increase in incomes is caused mainly by an increase in total factor productivity.

Although they do not directly measure whether current immigrants impact institutions, their findings cast doubt on claims that immigrants bring social capital that harms destination countries' formal institutions or culture in a way in which total factor productivity is harmed.

Clemens and Pritchett (2016) also attempt to answer the new economic case for migration restrictions by examining how migration impacts total factor productivity in destination countries. They use data on three key parameters, transmission (the extent to which origin country total factor productivity is embodied in the immigrants), assimilation (that rate at which migrants productivity becomes like natives over time), and congestions (the degree to which transmission and assimilation change at higher migration stocks) to model dynamically efficient migration rates. Their evidence implies

a substantial reduction on current migration restrictions would improve efficiency but that the optimal quantity would still fall short of open borders.

Clemens and Pritchett is an important response to the new economic case for immigration restrictions because it is able to estimate effects beyond the effect that current stocks of immigration have had on total factor productivity and project effects at rates of immigration higher than observed in the world today. However, the response is limited by the fact that the transmission and assimilation parameters are measured by gaps and changes in immigrants' income earnings. Income gaps and changes in those gaps may tell us little about external effects of immigrants on the total factor productivity of natives if deterioration in institutional quality is the primary channel through which immigrants impact the productivity of others. The economic case for open borders is stronger than Clemens and Pritchett imply if income differentials may be explained by differences in private good human capital while there exists no differences in public good human capital that would lower the institutional quality and thus productivity of natives. Conversely, the economic case for immigration restrictions would remain intact despite Clemens and Pritchett's evidence if there are persistent public good human capital beliefs that lower the quality of institutions which do not assimilate as rapidly as private good human capital as measured by wage assimilation.

Clark et al. (2015) was the first paper to directly examine whether immigrants undermine a measure of institutions that has been shown to be an important cause of high living standards and economic growth. They examine how migration impacts countries' economic institutions using the *Economic Freedom of the World Annual Report*. They study how the initial stock of immigrants in 1990, and the subsequent 20 year flow of

immigrants, impacted the change in countries' economic freedom in a cross section of 110 countries from 1990 to 2011. Rather than institutional deterioration, they find a positive and statistically significant relationship between both initial stocks, and flows of immigrants, with economic freedom. Their estimates are also economically significant. For instance, in one specification they find that a one standard-deviation higher immigration stock increases economic freedom by 0.34 points 20 years later and using an estimate for the impact of economic freedom on growth (Gwartney, Holcombe, and Lawson 2006), this suggests that a higher immigrant share of this magnitude will generate a 0.45 percentage point higher long-run annual growth rate. In their 32 reported regressions they do not find a single instance of a negative and statistically significant relationship between immigration and economic freedom.

Clark et. al. (2015) is an important first step in studying how immigrants impact destination country institutions since, as Borjas put it, "Unfortunately we know little (read: *nothing*) about how host societies would adapt to the entry of perhaps billions of new persons," (2015: 967, emphasis original). Knowing how existing stocks and flows of immigrants have impacted institutions is a start but that impact has occurred in a world of managed migration. The percent of the population that were immigrants across the 110 countries in Clark et. al. ranged from essentially zero to 77 percent but averaged only 7.4 percent. This same limitation applies to Ortega and Peri who measure total factor productivity (2014). Perhaps the levels of migration in these samples has not reached a critical mass that would negatively impact institutions. Perhaps there is a selection bias in which immigrants are admitted that would not be present in a world of open borders. Clemens and Pritchett (2016) avoid the limitations of

examining only existing stocks and flows of migration but are limited by the inability to estimate external effects of immigrants that are not embodied in their wage differentials.

Empirically examining how open borders would impact institutions in the modern world (rather than in the 19th century where free migration existed but societies were less developed and travel was more difficult) is difficult because virtually all developed countries today have substantial restrictions on mass migration. Israel is an important exception. Israel has immigration restrictions on non-Jews but the “Law of Return” allows all worldwide Jews to immigrate to Israel regardless of their current country of origin.

The next section examines the merits and demerits of 1990s Israel as a case study that has implications beyond a story of $n = 1$. A number of political scientists (Gerring 2007; Lieberman 2005; Sekhon 2004; Tarrow 1995, 2010) have called for using quantitative methods to complement qualitative case studies in comparative analysis, so section III employs a synthetic control methodology to compare Israel’s institutional evolution during the period of mass migration to a “synthetic Israel” that does not experience the mass migration. The case study in section IV documents examines the causal mechanisms through which mass migration impacted institutions. The final section concludes.

II. Israel as a Natural Experiment in Mass Migration

Numerous economic studies have used the migration from the former Soviet Union (FSU) into Israel in the 1990s as a natural experiment. This mass migration has been used as a natural experiment to study the impact of immigrants on wages and labor market outcomes (Friedberg 2001, Cohen-Goldner and Paserman, 2006, 2011, Borjas and Monras 2016), housing markets (Vlist and Czamanski 2011), and prices (Lach 2007). The Israeli situation is unique because the Law of Return was established in 1951 and then nearly 40 years later, the collapse of

the Soviet Union provided a large exogenous shock to Israel when its prohibitions on emigration were lifted and the country subsequently collapsed.

The 1990s saw a 20 percent increase in Israel's population due to an influx of Jews from the former Soviet Bloc (See Figure 1). In 1990 alone, Russian immigration increased the population by four percent. For comparison, immigration to the United States at the turn of the 20th century averaged 1 percent annually (Friedberg 2001: 1375). Israel provides us with a unique case of a modern economy with a welfare state that experienced a mass migration that was not generated by a change in its own immigration policies.

INSERT FIGURE 1 ABOUT HERE

This natural experiment has two features that make it particularly well suited to analyze the negative importation of social capital that could undermine institutions that concerns Borjas and Collier. First, and most obviously, all of these immigrants were coming from a country with a more than 70 year history of socialism and the associated anti-capitalist propaganda. If the immigrants were to agitate politically based on the ideology of their origin country it would clearly have the potential to undermine Israel's democratic and more capitalistic institutions.

Second, and particularly importantly, Israel provides the easiest situation for immigrants to directly impact the political process. The Law of return allows Jewish immigrants to have full citizenship, including the right to vote and to run for office, from the day they arrive in Israel. As will be described in the next section, the immigrants from the FSU quickly took full advantage of these rights.

There are also two drawbacks for using Israel as a case study to address the concerns of Borjas and Collier. First, and most obviously, Israel's open borders policy only applies to world-wide Jews and, at the time, the ruling elite and much of Israeli society desired a mass migration

of European Jews. Secondly, these migrants probably possess a different mix of human capital from what could be expected from mass migrations from third-world countries.

There is no doubt that the political leadership of Israel desired the mass migration of Jews from the FSU. Jewish leaders were enthusiastic about the wave of Russian immigrants when it began because they were worried by the higher fertility rate among the Arabs and African and Middle Eastern Jews compared to the Ashkenazi Jews who were the country's ruling elite. In 1990 Prime Minister Yitzhak Shamir told a group in Tel Aviv "Just when many among us were saying that time is working against us, time has brought us this Aliya and has solved everything. In five years we won't be able to recognize the country. Everything will change – the people, the way they live – everything will be bigger, stronger. The Arabs around us are in a state of disarray and panic" (Quoted in Al-Haj 2004: 182). Meanwhile the leader of his opposition, Shimon Peres, stated "I am convinced that the mass Soviet immigration is one of the greatest things occurring to our people" (Quoted in Al-Haj 2004: 182).

The overall veteran Jewish population also viewed the immigrants positively in both 1990 and in 1999 (Al-Haj 2004: 191).¹ However, Mizrahi Jews, who generally are of a lower socio-economic status, much like those who directly compete with immigrants in other countries, were against the mass migration from the Soviet Union because of fears of a slow economy and increasing unemployment (Al-Haj 2004: 182). The Mizrahi Jew's lack of support for the immigrants stems from the fact they thought that their existing relative disadvantaged status in terms of housing, employment, and upward mobility, would be further weakened by the immigrants and that these immigrants would divert government resources away from helping them (Al-Haj 2004: 184).

¹ A 1990 survey found that Ashkenazi Jews were most supportive and Arabs least supportive of immigration from the Soviet Union with Mizrahi Jews falling in between (Al-Haj 1993: 296).

Despite the desire of much of the Israeli population to attract Jews from the FSU for cultural reasons there is good reason to believe that despite the “Jewish” makeup of these immigrants that they do represent a case of “normal” immigration that could serve to undermine institutions.

There was initially a lack of clarity of who qualified as a “Jew” under the Law of Return, so the law was amended in 1970 to clarify that all Jews, as well as any non-Jew spouses of a Jew, non-Jewish children and grandchildren of a Jew and their spouses, are eligible under the Law of Return, thus the right of migration and citizenship was extended to many who were not Jewish according to *halakhah* (Jewish religious Law) (Weiss 2001). As a result, the majority of the immigrants from the FSU were non-religious Jews. As Al-Haj summarized from his surveying of the immigrants,

These immigrants relate to the Jewish component of their identity in a way that does not manifest a religious-orthodox meaning. It is rather a secular form of identity, largely detached from halakhah. This is manifested in other findings about immigrants’ religiosity. The vast majority (74%) are secular, to judge by their self-identification, attitudes, and actual behavior; 24.6% are traditional and only 1.4% are religious (2004: 102).

Similarly, Chernyakov, Gitelman, and Shapiro studied immigrants from the FSU in three cities in 1992-93 and found that “at present, not more than 6 percent of the adult Jews can be called, with a reasonable degree of certainty, believers in the Jewish faith” (Chernyakov, Gitelman, and Shapiro 1997:2 95).

Not surprisingly then, the majority of these immigrants did not migrate to be part of the Zionist project. In fact, when surveyed, 49 percent said they would have migrated elsewhere if it had been feasible (Al-Haj 2004: 101).

The immigrants from the FSU were not only religiously heterogeneous compared to the veteran Israeli population but they were also linguistically and culturally distinct. In the 1979 Soviet census only 14.2 percent of the Soviet Jewish population claimed a Jewish language as their mother tongue and another 5.4 percent claimed it as a second language, while 97 percent of Soviet Jews spoke Russian (Al-Haj 2004: 74). As a result, by 1995 there were 50 Russian language newspapers and periodicals being published in Israel (Leshem and Lissak 2000: 47) and in his survey Al-Haj finds that, for the majority of the immigrants from the FSU, Russian language media broadcasting from both Russia and Israel is the major source of their information and entertainment (2004: 100).

Similarly, most immigrants felt that it was important to maintain their Russian culture. When surveyed, 88 percent said it was important for their children to be familiar with Russian culture and 90.6 percent said it was important or very important for their children to know the Russian language (Al-Haj 2004: 108). Al-Haj also “found that a substantial number of these immigrants still have a strong nostalgia for and social and cultural ties to their country of origin and a deep pride in their original culture coupled with a sense of superiority to Israeli culture” (2004: 219).

These facts have led scholars such as DellaPergola (1998) to argue that Jewish migration to Israel is not a unique form of migration because of its ideological Zionist motivations but is instead largely motivated by political, economic, cultural, and demographic factors just as typical migrations are. As Al-Haj summarizes from his surveys of the immigrants,

Based on their characteristics and motivation, the 1990s newcomers from the FSU should be classified as “normal” immigrants rather than “olim.” In other words, this wave of immigration was motivated not by Jewish-Zionist ideology but by pragmatic cost-benefit considerations. Like other typical migration flows, the members of this group were motivated mainly by “push factors” in their home countries – notably political and economic instability, concern for their children’s

future, increasing trends of extremism, nationalism, and antisemitism, and their desire to look for better opportunities outside the FSU (Al-Haj 2004: 100).²

Similarly, Frankel observes that “The ideological factor governing the actions of many of the (Russian) immigrants to Israel in the nineteen seventies was largely absent from this group (1990s). Indeed many were deeply unhappy to have to live in Israel and made their decision *faute de mieux*. Furthermore, among the many who arrived during the later period were numerous spouses and in-laws who were not Jewish, not even a little bit. Their proportion was far higher than in the earlier period” (2012: 181).

One important caveat remains. Despite the relative poverty of the immigrants from the FSU compared to the veteran Israeli population it would be a mistake to characterize it as a mass migration of unskilled workers. Among the FSU immigrants to Israel between 1990-1999 there were 90,718 engineers and architects; 19,737 physicians, dental surgeons, and dentists; and 21,643 nurses and paramedical workers. 30.4% of the immigrants were scientific and academic workers in the FSU (Al-Haj 2004: 161). Along these lines, Kimmerling (1998) argues that the immigrants from the FSU had human capital that was very similar to the Ashkenazi middle class in Israel.

Any individual case study is bound to have some unique elements that limit the degree to which we can generalize the findings from it. In the case of the mass immigration to Israel from the FSU, it would seem that the primary concern, that the migration was religiously and culturally homogeneous with the population of the destination country, is unfounded. The Jews who migrated are best classified as normal immigrants. However, the fact that the immigrants

² He also notes that most studies of the 1990s wave consider them to be normal immigrants rather than olim (ideologically motivated) (Al-Haj 2004: 86).

were relatively well educated and skilled coming from a second world country rather than uneducated and coming from a third-world country should be kept in mind.

III. Synthetic Control of Institutional Evolution

We use Gwartney, Lawson, and Hall's (2014) Economic Freedom of the World Annual Report (EFW) to measure the evolution of Israel's economic institutions.³ The index is a reasonable proxy for economic institutions that could impact a country's production function. It has been used in more than 100 papers finding that higher levels of freedom and/or improvements in freedom are associated with higher levels of income, growth, and a host of other improved economic outcomes (for surveys see: De Haan, Lundström, and Sturm (2006), Hall and Lawson (2013)).

The index incorporates 43 variables across five broad areas: 1. Size of Government; 2. Legal Structure and Property Rights; 3. Access to Sound Money; 4. Freedom to Trade Internationally; and 5. 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.

³ Israel's political institutions were largely unchanged over the period of mass migration. Although reforms were made to Israel's electoral rules for the selection of the Prime Minister during the period of mass migration, the changes did nothing to undermine Israel's strong democratic institutions. After the decade of mass migration Israel still scored a 1 (highest on a 1 to 7 scale) on Freedom House's measure of political rights just as it had prior to the migration from the FSU. That ranking indicates that Israelis "enjoy a wide range of political rights, including free and fair elections. Candidates who are elected actually rule, political parties are competitive, the opposition plays an important role and enjoys real power, and the interests of minority groups are well represented in politics and government" (Freedom House 2016, Accessed at: <https://freedomhouse.org/report/freedom-world-2016/methodology>).

Prior to the mass migration from the FSU Israel scored a 4.92 out of a possible 10 on the EFW Index. That was below the world average of 5.77 resulting in a rank of only 92nd freest. Israel had always scored below the world average in economic freedom until the mid 1990s. But during the decade of mass migration Israel improved its economic freedom score by 45 percent (more than two full points). By 1995 it had surpassed the global average in economic freedom and by 2000 it had climbed 38 spots to rank 54th freest. Economic freedom continued to improve by another half a point, as immigration waned in the early 2000s, reaching a peak of 7.6 in 2005 ranking 45th in the world. The reforms have held and Israel's economic freedom score has been largely unchanged over the last decade. The overall transformation of economic freedom in Israel during the period of mass migration and the five years immediately following it resulted in Israel catapulting from 15 percent below the global average to 12 percent above it and improving its ranking among countries by 47 places.

Figure 2 breaks down Israel's changes in economic freedom by the five main areas of the index. Four of the five areas of economic freedom improved during the 1990s. The lone exception, the size of government, fell 23 percent in the decade before recovering to 97 percent of its pre-migration wave score in 2005 and subsequently improving past its original level by 2010. The dip in the score for the size of government is unsurprising since these economic migrants were poorer than most of the native born and immediately qualified for welfare state benefits since they became full citizens upon arrival. Also, immigrants to Israel are less likely to generate "blow back" against the welfare state from veteran citizens because of the Zionist notion that the state is obligated to take care of all world-wide Jews when they return to Israel. The decline in economic freedom in this area was largely driven by the fact that transfers and

subsidies rose from 16.7 to 22.8 percent of GDP over the decade, while marginal tax rates were also increased.

INSERT FIGURE 2 ABOUT HERE

A legal system that upholds contracts and secures private property rights is perhaps the bedrock of the institutions responsible for the strong production functions in developed countries. The score in this area improved by nearly 83 percent during the 1990s. Unfortunately, there is no single policy or group of policies that the data can directly point to because the security of property rights measure is constructed from a group of surveys of people's opinions on the security of their property rights. So, while the cause of the improvement may be unclear, it is clear that mass migration did nothing to undermine people's confidence in the security of their property rights and integrity of their legal system.

Although mass migration modestly increased transfer payments, Israel didn't resort to inflation to accommodate the arrivals. Israel, which had experienced triple digit annual inflation throughout the 1980s, finally reined in its monetary policy in the 1990s getting inflation down to the single digits and at barely over 1 percent by 2000. As a result, Israel's score for Area 3, access to sound money, improved substantially during the period of mass migration.

Israel increased its freedom to trade internationally by nearly 25 percent during the 1990s. Tariff interference with trade was already low by 1990 and did see slight reductions from 0.92 percent of the trade sector to 0.37 percent over the decade. But most of the improvement in this area came from decreased capital controls.

Finally, regulatory restrictions on economic freedom also improved by 40 percent during the 1990s. Improvements were made in credit market regulations as the ratio of private sector lending relative to government borrowing increased and as interest rate controls (via negative

real rates) were eliminated. The measure of labor market regulation also improved as employers reported less regulatory interference with the hiring and firing of workers and collective bargaining reportedly played less of a role in the determination of wages.

Contrary to fears of a wave of immigrants, with social capital from an unfree society, destroying the destination country's institutions, it is clear that the mass wave of immigration from the former Soviet Union to Israel in the 1990s coincided with a substantial improvement in a measure of economic institutions that has been associated with improved long-run economic performance. But this does not establish that the large migration caused the improvement or that an even larger improvement would not have happened in absence of the mass migration. Ideally, to make such a comparison we would compare two Israels, one that experienced the mass migration and one that did not experience it but was exactly the same in every other way. Since no such country exists, use of a synthetic control methodology is the next best alternative. This method creates a control group by synthesizing changes in a group of countries similar to Israel to create "synthetic Israel."

The synthetic control method developed in Abadie and Gardeazabal (2003) to study conflict in Basque Country has been used to study California's tobacco control programs (Abadie, Diamond, and Hainmueller 2010), the impact of Hugo Chavez on economic outcomes in Venezuela (Grier and Maynard 2016), and East German Unification on West German economic growth (Abadie, Diamond, and Hainmueller 2015) among other topics. This methodology creates a synthetic counterpart to the country or region of interest based on a weighted average of a number of regions that are similar to the region of interest. Weights are based on how similar the indicator variables of these regions are to the region of interest and

more weight is also put on explanatory variables that influence of the outcome variable more significantly (See Abadie et al. 2010, 2014 for a more technical discussion).

In order to construct synthetic Israel we restricted the donor pool of countries to OECD nations that were member states during the time period we cover and Middle Eastern and North African nations (MENA). The donor pool needs to be restricted to a subset of countries with similar economic processes and/or geography to avoid overfitting that can occur from including the idiosyncratic variations from a large number of unrelated countries (Abadie et al. 2014). The former communist countries need to be excluded because of their different evolutionary processes stemming from the fall of the Soviet Union. Jordan was also excluded because it experienced a similar immigration surge in the 1990s, thus making it unsuitable as a counterfactual region that did not experience large scale migration. Out of this donor pool, 31 nations had economic freedom data available back to 1975 – a full 15 years prior to the mass migration into Israel. We started the construction of synthetic Israel in 1975 because the 1973 Yom Kippur War had a disproportionate and confounding effect on economic freedom in Israel and many of its neighboring countries but did not affect the OECD nations. A synthetic Israel was created from this donor pool of OECD and MENA countries based on weighted average of their pre-1990 economic freedom scores, real GDP per capita, Polity IV score, crude birthrate, their membership in the Organization of Islamic Cooperation which is an indication of Islam's importance for the state, and measures of major violence between nations and inside of them.

The synthetic control algorithm created a control that is composed of 7.9 percent Iran, 2.3 percent Italy, 24.1 percent Syria, and 65.8 percent Turkey. Figure 3 shows the pre-immigration evolution of economic freedom values for the real Israel, the synthetic Israel, OECD nations, and MENA nations. Synthetic Israel clearly tracks the evolution of the real Israel prior to the 1990

treatment period better than the other comparison groups. The root mean square percentage error (RMSPE) measures the lack of fit between the path of the outcome variable for any particular country and its synthetic counterpart. The synthetic control RMSPE used to predict Israel's economic freedom prior to the mass migration was 0.0645397. The synthetic control mimics pre-Soviet immigration better than the simpler OECD (RMSPE 0.3578536) and MENA (RMSPE 0.2412942) nation controls.

Figure 4 shows how well synthetic Israel tracks real Israel before, during, and after the mass migration. The evolution of economic freedom in synthetic Israel tracks the evolution of real Israel closely until the mass migration and then economic freedom in the real Israel increases much more rapidly in the 1990s. Then, following the end of the mass migration, the evolution in economic freedom in real Israel is parallel to synthetic Israel, albeit at a higher level.

The synthetic control methodology allows us to conduct in-time and in-place placebo tests in order to increase our confidence that the departure from the performance of synthetic Israel stems from the mass migration, rather than a general deterioration in the predictive power of the synthetic comparison. We can conduct an in-time placebo by moving the intervention period to 1985 to see if a synthetic control based on the pre-1985 variables loses its ability to mirror the performance of Israel for the subsequent 5-years after the intervention but prior to the mass migration.⁴ If it does, it should decrease our confidence that the break observed in 1990 was caused by the mass migration. As Figure 5 illustrates, the synthetic Israel from the 1970s continues to track the real Israel in the 1980s with a pre-intervention RMSPE of 0.0418518.

The second robustness check is to reassign the intervention to different countries through in-place placebos. This placebo creates a synthetic version of each control country that did not experience a mass migration and checks to see if a larger difference exists between their

⁴ We could not test 1980 because there would not be enough pre-1980 data to construct a reliable synthetic Israel.

synthetic version and their post 1990 performance than does for Israel. Confidence in the result that Israel's economic freedom was affected by the Soviet migration surge would be undermined if the magnitude of the in-place effect was similar for Israel and other countries. Figure 6 applies the synthetic control method to every country in our sample. The result shows that Israel has a consistently higher and increasing economic freedom score throughout the post-intervention period.

We also checked robustness by interpolating economic freedom scores between five year periods and by the leave-one-out method. Interpolation did not change our finding.⁵ In doing the leave-one-out method (Klössner et al. 2015) as a further robustness check we repeated the construction of synthetic Israel four times, each time leaving out one of the countries that had received a positive weight in constructing the original synthetic Israel. When either Iran or Italy were removed the pre and post-intervention results were very close to original findings. When either Syria or Turkey is dropped the pre-intervention RMSPE's deteriorated considerably, however, the post-intervention RSMPE's do not change nearly so much and, as Figure 7 illustrates, there remains a clear divergence between the evolution of the real Israel in 1990 and any of these synthetic counterparts. Removing Turkey and Syria reduced the similarity between synthetic and real Israel *before* the intervention but there was still a divergence at the intervention period that continued post-intervention, so our confidence that the mass migration impacted institutional evolution remains robust.

One important empirical caveat remains. The empirical literature studying factors that change economic freedom has consistently found that the prior levels of economic freedom are the most statistically and economically significant variable in predicting future levels of

⁵ The results were nearly identical with a pre-intervention RMSPE of .068591 and a clear divergence in 1990.

economic freedom.⁶ Thus, not surprisingly, the synthetic control algorithm ends up putting an extremely heavy weight on prior economic freedom scores when constructing a synthetic counterpart to Israel. This somewhat tempers our confidence in making causal claims about the impact of immigration on economic freedom. However, these concerns are somewhat offset by the fact that, after the divergence during the period of mass migration, economic freedom in synthetic Israel and the real Israel return to following a parallel path at their new divergent levels of economic freedom.

Creating a synthetic control is the best available method to compare the institutional evolution to a counterfactual that might have occurred absent the mass migration of immigrants from the former Soviet Union to Israel. With the above caveat in mind, the difference between the performance of the real Israel compared to its synthetic counterpart and the robustness of our results to standard placebo tests, increase our confidence that the mass migration had quantitatively significant impact on institutions that would not likely have occurred in the absence of the mass migration. We next turn to a qualitative case study to examine the specific mechanisms through which immigrants impacted institutional evolution.

IV. Case Study: How Migration Changed Institutions

There are three primary ways that mass immigration could impact a destination country's economic institutions. Mass migration could impact institutions by:

- 1) Decreasing social trust in a way that erodes the rule of law and security of property rights
- 2) Changing the policy views of the native born population on the appropriate role of existing economic institutions

⁶ For a few recent examples see: March et al. (forthcoming), Ryan and Powell (forthcoming), Bologna and Young (2016), Clark et al. (2015), O'Reilly and Powell (2015).

- 3) Immigrants holding policy views that are different than the native born population on the appropriate role of economic institutions and participating in the political process in order to change the role of economic institutions to better match the preferences of the immigrants.

The first of these mechanisms does not appear to have occurred in the case of mass migration from the FSU. Prior studies have found a negative relationship between ethnic, linguistic, or religious fractionalization, and public goods provision (for example, Easterly and Levine 1997, Alesina, Baqir, and Easterly 1999). Perhaps, most relevant for this mass migration is prior research that has found that immigrants increase corruption in destination countries when they come from corruption-ridden countries (Dimant, Krieger, and Redlin, 2013). If immigrants were negatively impacting institutions through these channels it would appear in our measure of security of property rights and the rule of law (which also contains measures of corruption). Yet it is this area of economic freedom that we see the biggest improvement, 83 percent, during the period of mass migration.

Most prior research on how immigration might impact the policy views of the native born population has focused on the role of the welfare state. 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 there is also a 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. 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. In the case of mass migration to Israel it doesn't appear to have altered the native born population's beliefs about the desirable size of the welfare state. This could be, in part, because of the Zionist belief that it is the State's obligation to take care of Jews when they first "return" to Israel. The fact that our measure of size of government deteriorated because of an increase in transfer spending during the period of mass migration and then later recovered to its pre mass migration level after immigrant absorption was complete is an indication that the transfers and subsidies increased because of the sheer number of new arrivals rather than a change in the desired role of the welfare state.

We believe that the main mechanism through which the mass migration impacted economic institutions was through the immigrants' exercise of their right to participate in the political process. A migration from the FSU amounting to 20 percent of Israel's total population, coupled with full citizenship and political rights, is nearly guaranteed to play a role in institutional evolution in Israel via the immigrants' impact on determining the outcomes of elections that ultimately determine policy. Even from the very beginning of the migration, before the sheer numbers of migrants built up, Israel's political equilibrium was particularly susceptible to being influenced by the new arrivals. However, unlike the fears outlined by Borjas and Collier we find evidence that the immigrants desired policies and institutions that

were the opposite of the policies and institutions that caused low factor productivity in their origin country.

The 1984 election resulted in a grand coalition government because the Labor-led left block tied with the Likud-led right bloc. The grand coalition of these two major parties and some smaller parties had broken down by 1990 (Doron 1996: 42). These two major parties had been at nearly equal strength from the late 1980s going into the period of mass migration beginning in the 1990s (Al-Haj 2004: 134). As a result, the immigrants could shift the position of the median voter almost immediately. As Fein (1995) observed, “As early as 1992 it was clear that they could determine the outcome of the election of the Prime Minister.” In fact, the alternation between Labor and Likud Prime Ministers each election in the 1990s in favor of the opposition candidate (Rabin in 1992, followed by Netanyahu, followed by Barak) has been attributed to swings in the Russian immigrant vote based on their dissatisfaction with their economic absorption leading them to vote against the incumbent (Al-Haj 2004: 135, Frankel 2012: 180).

At the beginning of the period of mass migration the “conventional wisdom was that Russian Jews would have no association with the socialist Labour Party, since they were supposed to be averse to everything connected with socialism... the Likud Party’s Russian language electoral propaganda for the 1992 election attacked the Labour Party’s policy as ruinous socialism with empty slogans, red flags and May Day Parades” (Siegel 1998: 144). However it was the Russian immigrants’ vote that helped put the Labor government in power in 1992. But this was not an indication of their preference for socialist policies. It was “more as a protest against the policy of the Likud government, which ‘did not do much for aliya’, than out of support for socialism” (Siegel 1998: 145). In fact, as Shindler describes it, “Voters were

distinctly uninterested in building socialism...” during Rabin’s campaign, “even the party colour was changed from socialist red to patriotic blue. All this appealed to the 260,000 Soviet immigrants who were eligible to vote. They had had enough of the hollow claims of the apparatchiks back in the USSR” (Shindler 2008: 228). Instead, the migrants were responding to the Labor party’s campaign that “focused on the widespread feeling that the earlier Likud government had fumbled the absorption effort” (Siegel 1998: 144).

Yet, when it came to actual economic policy, a vote for Labor over Likud, by 1992 meant little. The differences between the Labor and Likud in their support for socialism compared to capitalism had narrowed considerably by the time migrants were voting in elections. As Doron describes, “By the 1992 election, the two major political parties adopted privatization as the most salient policy option for the improvement of individual economic and social welfare. Since then, the reduction in the scope of government involvement in the economy has rested on an almost universal agreement by most leading Israeli politicians” (1996: 47). It seems inconceivable that both parties would begin favoring economic liberalism at a time when mass migration could so easily change electoral outcomes unless those very immigrants were mostly in favor of liberal economic policies.

Although both major parties courted the immigrants’ votes, neither included a single new immigrant on their list of candidates in the 1992 election.⁷ New immigrant parties, Democracy and Aliya, Tali, Am Ehad, and Yad be-Yad, were formed in response but none received the 1.5 percent of the votes required for a seat in the Knesset (Siegel 1998: 45). Despite the immigrant parties’ lack of electoral success it set the precedent of party formation for the new immigrant parties that would form in 1995.

⁷ Israel has a proportional electoral system where people vote for party lists and parties earn seats in proportion to their share of the popular vote. Seats are then awarded to candidates according to where they were positioned on their party’s list.

The Israel in Aliya political movement that would ultimately become a political party, had substantially more success than the 1992 immigrant parties. Siegel reports that, “According to the press secretary of the movement, almost all the political parties approached Scharansky (the movement leader) with proposals of cooperation. In contrast to the political leaders of the Russian Jewish movements in the previous election, Israel in Aliya was accepted into Israeli politics” (Siegel 1998: 159). Though an immigrant party, the movement was perceived to be very close with the Likud Party (Siegel 1998: 163).

The Party of Aliya was formed in 1995 as an alternative Russian political party to the Israel in Aliya party. “Aliya members promoted the message that though it was important to bring in more Russian Jews (as Scharansky claimed), it was even more important to demand social and economic reforms so that these new immigrants would have a chance to lead a normal life in Israel” (Siegel 1998: 164). However, when one compares the programs of these two Russian parties it is obvious that they made essentially the same demands for socio-economic reforms (Siegel 1998: 165).

The two major parties took notice of the increased power of the new immigrant parties prior to the 1996 election. In response to the formation of these immigrant parties, “The Russian lobbies inside the Labour and Likud parties warned that if action was not taken to persuade the immigrants that ‘they can contribute to their better integration in Israeli society’, the electoral damage to the major parties could be devastating... Many young Russian Jewish immigrants of the Great Immigration were recruited to the ‘Russian’ staff of every political party” (Siegel 1998: 169).

The FSU immigrants clearly made their votes heard in the 1996 elections. The immigrant Israel in Aliya party won seven seats (out of 120) in the Knesset. When the winning

Likud party formed Israel's 27th government in 1996 they included Israel in Aliya as a member of the coalition government. This coalition government would remain in power and determine policy until the 1999 elections. By 1999, another Russian immigrant party, Israel Beitenu, had been formed. In that election the two Russian parties combined to capture 10 seats in the Knesset (six for Israel in Aliya and four for Israel Beitenu) while the Russian voter turnout rate of 84.7 percent exceeded the nationwide average of 78.7 percent (Al-Haj 2004: 137-138). Most Russian immigrants (57 percent) voted for one of the two main Russian parties and Likud received the next highest share of their votes (14 percent) (Al-Haj 2004: 138).

In evaluating the voting behavior of the immigrants from the FSU in the 1990s it is accurate to claim that, "In general, the new immigrants tended to back the right-wing parties, and, as the nineties progressed, their voting power was palpable" (Frankel 2012: 179). However, "Both the right-wing and left-wing Zionist camps have become highly dependent on them [immigrants], which has allowed them [immigrants] to up the ante in political bargaining and to easily shift allegiance from one camp to the other" as well (Al-Haj 2004: 136).

The immigrants from the FSU influenced electoral outcomes through the creation of immigrant parties and a generally right-wing bent while not being adverse to switching loyalties between main parties to increase their leverage. Overall, as Al-Haj assessed the situation, "FSU immigrants in Israel have successfully penetrated the political system at the group level and become legitimate part of the national power center within a few years of their arrival" (Al-Haj 2004: 209). The sheer number of migrants, their rapid integration, and successful political mobilization "all have set Israel in a new direction" (Siegel 1998: ix). That new direction included an improvement in Israel's economic institutions.

VI. Conclusion

The mass migration from the FSU to Israel during the 1990s, that increased Israel's population by 20 percent, provides a unique natural experiment to study how mass migration from a country with very different political and economic institutions can impact the institutions in a destination country. The migration resulted from the exogenous shock of the relaxation of emigration restrictions in the Soviet Union and the State's subsequent collapse rather than any change in Israeli immigration policy. Israel is unique because it maintains an open borders migration policy for world-wide Jews, yet the immigrants from the FSU are largely considered "normal" immigrants motivated by "push factors" rather than religious or Zionists motivations. Israel is also unique in that it allows Jewish immigrants full citizenship and voting rights immediately upon arrival in Israel.

The immigrants from the FSU quickly became a political force by shifting the median voter, forming their own political parties, and eventually participating in the ruling coalition government. But despite these immigrants bringing human social capital with them that was influenced by a more than 70 year history of lack of democratic and economic freedoms in the FSU they did not influence Israel's institutional evolution in the direction of their origin country's institutions.

Israel's economic institutions made great strides in the direction toward greater economic freedom and away from socialism while the immigrants influenced the political process. The overall transformation of economic freedom in Israel during the period of mass migration and the five years immediately following it resulted in Israel catapulting from 15 percent below the

global average in economic freedom to 12 percent above average and improving its ranking among countries by 47 places.

Any case study must obviously be interpreted with caution. This study finds that unrestricted mass migration from an origin country with inferior political and economic institutions coincided with the enhancement of the economic institutions in the destination country. By coupling a case study methodology, that documents immigrant participation in the institutional evolution, with a synthetic control methodology, to assess the counterfactual, we have reasonable confidence that rather than mere correlation, the mass migration helped to cause the improvement of economic institutions. At a minimum, we have documented a case where mass migration failed to harm institutions in a way that many prominent social scientists fear that such a migration would.

This finding in no way proves that in every case unrestricted migration would not harm destination country institutions. However, as a complement to Clark et. al. (2015) that found in a-cross country empirical analysis that existing stocks and flows immigrants were associated with improvements in economic institutions, it should increase our skepticism of claims that unrestricted migration would necessarily lead to institutional deterioration that would destroy the estimated “trillion dollar bills” that the global economy could gain through much greater migration flows.

Figure 1: Annual Migration as a Percent of the Population

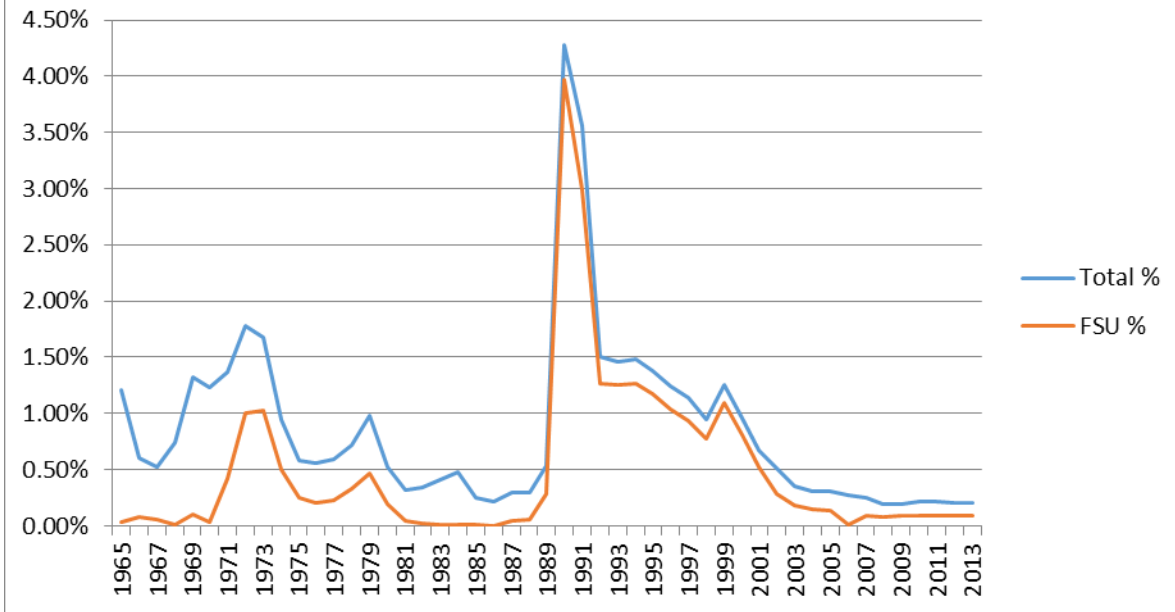


Figure 2: Israel Economic Freedom Components

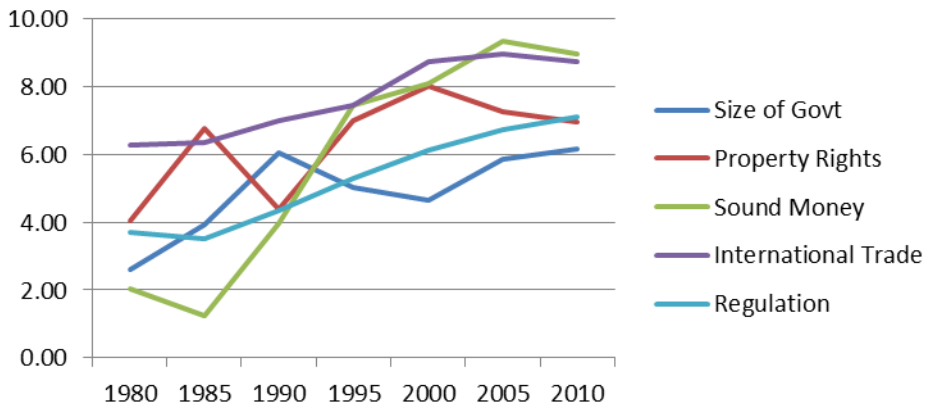


Figure 3: Economic Freedom Scores

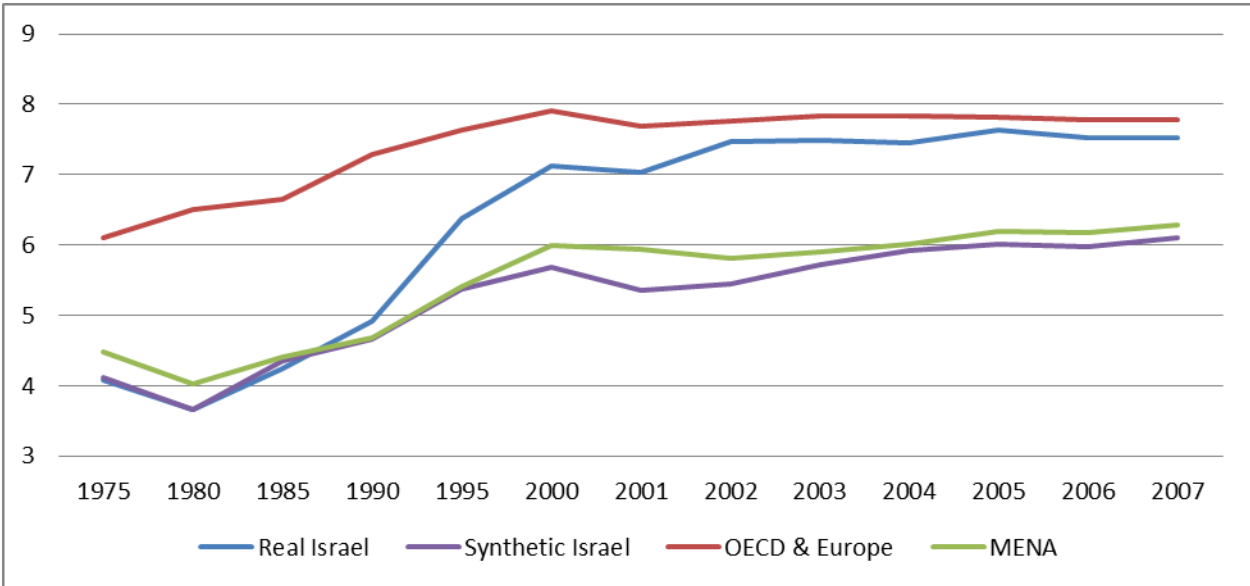


Figure 4: Israel Compared to Synthetic Israel

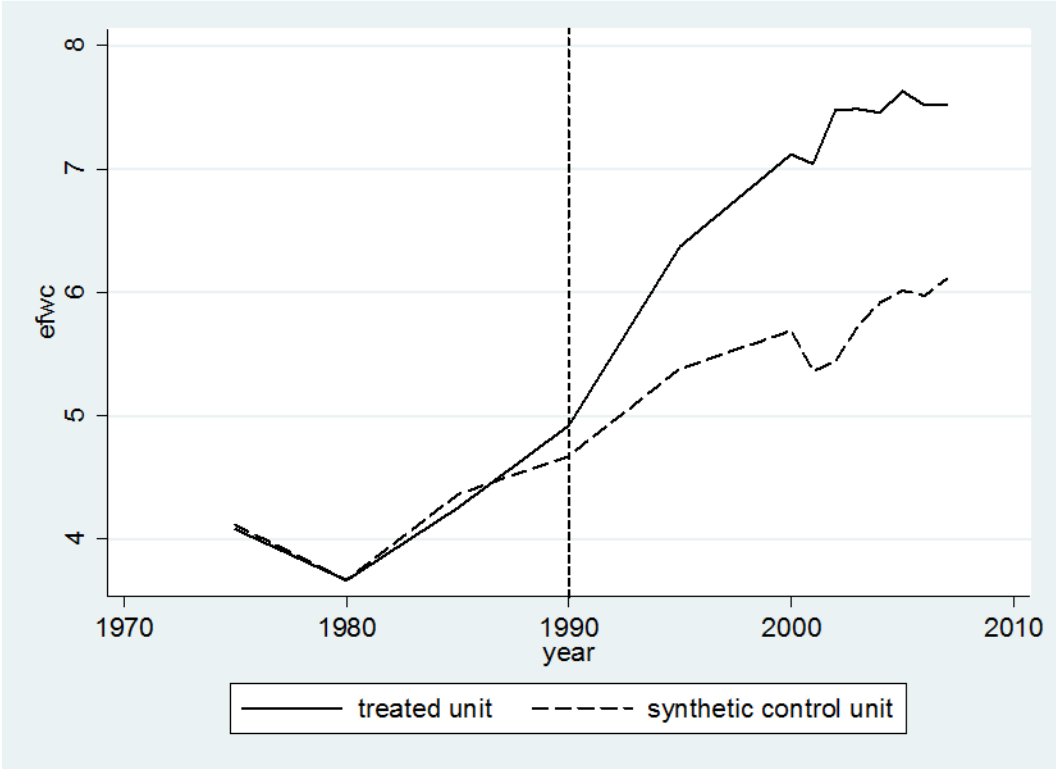


Figure 5: In-Time Placebo

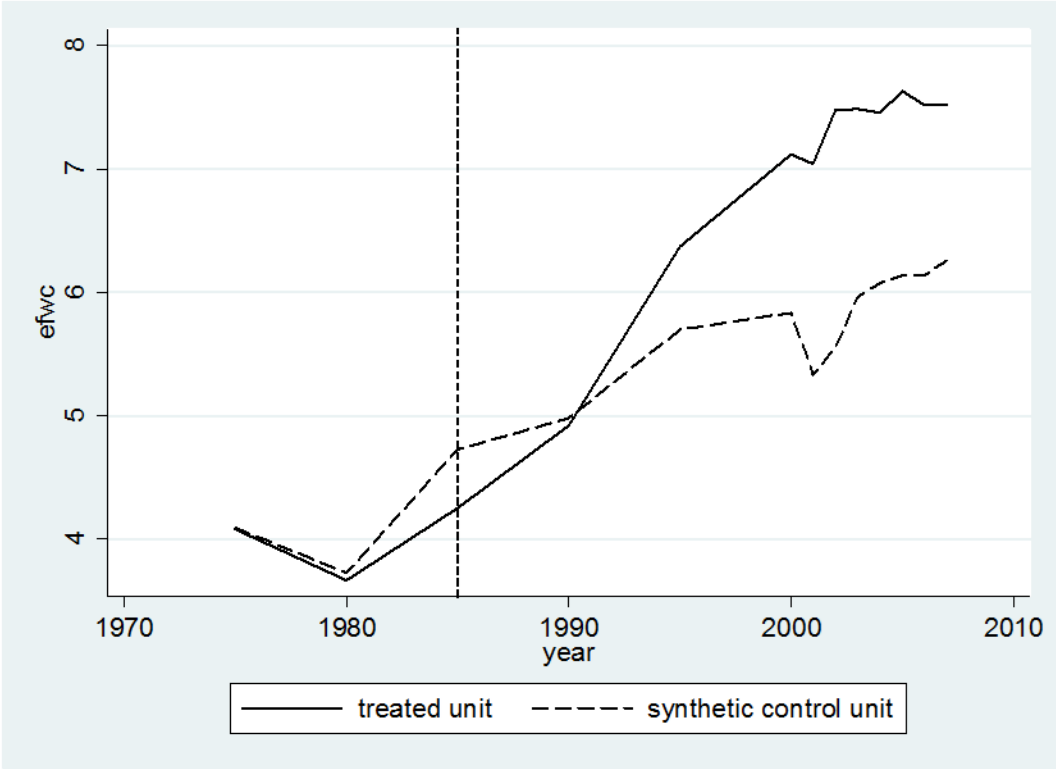


Figure 6: In-Space Placebo

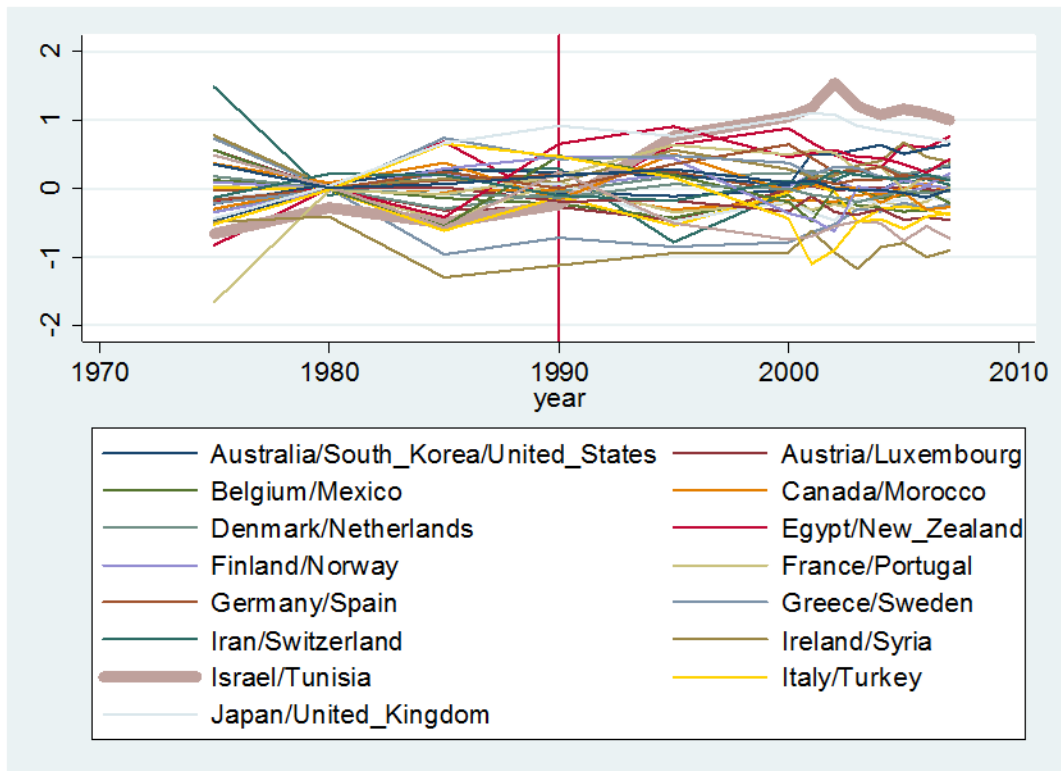
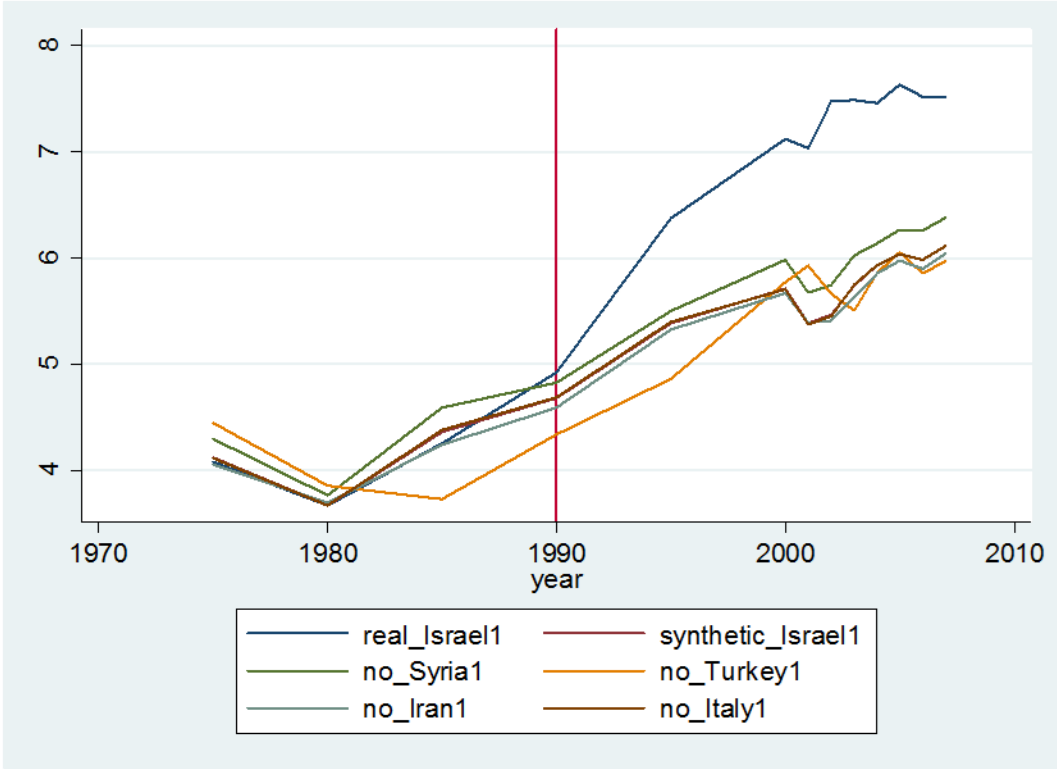


Figure 7: Leave One Out



References

- Abadie, A. A Diamond, and J. Hainmueller. 2010. Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program. *Journal of the American Statistical Association* 105 (490): 493-505.
- Abadie, A., A. Diamond, and J. Hainmueller. 2015. Comparative Politics and the Synthetic Control Method. *American Journal of Political Science* 59 (2): 495-510.
- Abadie, A. and J. Gardeazabal. 2003. The economic costs of Conflict: A Case Study of the Basque Country. *American Economic Review* 93 (1): 113-132.
- Alesina, Alberto F., Reza Baqir, and William Easterly. 1999. Public goods and ethnic divisions. *Quarterly Journal of Economics* 114:1243-84.
- Al-Haj, Majid. 2004. *Immigration and Ethnic Formation in a Deeply Divided Society: The Case of the 1990s Immigrants from the Former Soviet Union in Israel*. Leiden: Brill.
- 1993. Ethnicity and immigration: The Case of Soviet immigrants in Israel. *Humboldt Journal of Social Relations* 19: 279-304.
- Borjas, George J. 2015. Immigration and Globalization: A Review Essay. *Journal of Economic Literature* 53 (4): 961-974.
- 2014. *Immigration economics*. Cambridge: Harvard University Press.
- Borjas, George and Joan Monras. 2016. The Labor Market Consequences of Refugee Supply Shocks. *NBER Working Paper* 22656. www.nber.org/papers/w22656
- Brady, David, and Ryan Finnigan. 2013. Does immigration undermine public support for social policy? *American Sociological Review* 79:17-42.
- Chervyakov, Valeriy, Zvi Gitelman and Vladimir Shapiro. 1997. Cycles, trends, and new departures in world-system development. In *National Development and the World System*, edited by John W. Meyer and Michael T. Hannan, 276-296. Chicago: University of Chicago Press.
- Clark, J. R., Robert Lawson, Alex Nowrasteh, Benjamin Powell, and Ryan Murphy. 2015. Does Immigration Impact Institutions? *Public Choice* 163: 321-335.
- Clemens, Michael. 2011. Economics and emigration: Trillion-dollar bills on the sidewalk? *Journal of Economics Perspectives* 25: 83-106.
- Clemens, Michael and Lant Pritchett. 2016. The New Economics Case for Migration Restrictions: An Assessment. *IZA Discussion Paper* 9730.

- Cohen-Goldner, Sarit and M. Daniele Paserman. 2006. Mass Migration to Israel and Natives' Employment Transitions. *Industrial and Labor Relations Review* 59 (4): 630-652.
- Cohen-Goldner, Sarit and M. Daniele Paserman. 2011. The Dynamic Impact of Immigration on Natives' Labor Market Outcomes: Evidence from Israel. *European Economic Review* 55: 1027-1045.
- Collier, Paul. 2013. *Exodus: How Migration is Changing Our World*. Oxford: Oxford University Press.
- De Haan, Jakob, Susanne Lundstrom, and Jan-Egbert Sturm. 2006. Market-oriented institutions and policies and economic growth: A critical survey. *Journal of Economic Surveys* 20: 157-91.
- DellaPergola, Sergio. 1998. The global context of migration from the former Soviet Union to Israel. In *Immigration to Israel: Sociological perspective*, edited by Elazar Leshem and Judith Shuval, 51-92. New Brunswick, N.J.: Transaction.
- Dimant, Eugene, Tim Krieger, and Margarete Redlin. 2013. 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.
- Doron, Gideon. 1996. A Different Set of Political Game Rules: Israeli Democracy in the 1990s. in Lazin, Frederick, and Gregory Mahler (eds.) *Israel in the Nineties: Development and Conflict*. Gainesville: University of Florida Press.
- Easterly, William, and Ross Levine. 1997. Africa's growth tragedy: Policies and ethnic divisions. *Quarterly Journal of Economics* 112:1203-1250.
- Fein, Aharon. 1995. Voting trends of recent immigration from the former Soviet Union. In *The elections in Israel, 1992*, edited by Asher Arian and Michal Shamir, 161-171. Albany: State University of New York Press.
- Frankel, Edith Rogovin. 2012. *Old Lives and New: Soviet Immigrants in Israel and America*. Lanham: Hamilton Books.
- Freedom House. 2016. Freedom in the World. <https://freedomhouse.org/report-types/freedom-world>
- Freeman, Richard. 2006. People flows in globalization. *Journal of Economic Perspectives* 20: 145-70.
- Friedberg, Rachel M. 2001. The Impact of Mass Migration on the Israeli Labor Market. *The Quarterly Journal of Economics* 116: 1373-1408.

- Gerring, John. 2007. *Case Study Research: Principles and Practices*. Cambridge: Cambridge University Press.
- Grier, Kevin, and Norman Maynard. 2016. The Economic Consequences of Hugo Chavez: A Synthetic Control Analysis. *Journal of Economic Behavior and Organization* 125: 1-21.
- Gwartney, James, Randall Holcombe, and Robert Lawson. 2006. Institutions and the impact of investment on growth. *Kyklos* 59: 255-73.
- Gwartney, James, Robert Lawson, and Joshua Hall. 2014. Economic Freedom of the World: 2014 Annual Report. Vancouver, BC: Fraser Institute. Available http://www.freetheworld.com/datasets_efw.html.
- Hall, Joshua, and Robert Lawson. 2013. Economic freedom of the world: An accounting of the literature. *Contemporary Economic Policy* 32:1-19.
- Jones, Clive. 1996. *Soviet Jewish aliya 1989-1992: Impact and Implications for Israel and the Middle East*. In *Immigration and Ethnic Formation in a Deeply Divided Society: The Case of the 1990s Immigrants from the Former Soviet Union in Israel*, by Majid Al-Haj. 2004. Leiden: Brill.
- Kimmerling, Baruch. 1998. The New Israelis: Multiple cultures with no multiculturalism. *Alpayim* 16: 264-308 (Hebrew).
- Klössner, Stefan, Ashok Kaul, Gregor Pfeifer, and Manuel Schieler. 2016. Comparative Politics and the Synthetic Control Method Revisited: A note on Abadie et al. (2015). *Working Paper*.
- Lach, Saul. 2007. Immigration and Prices. *Journal of Political Economy* 115: 548-587.
- Leshem, Elazar, and Moshe Lissak. 2000. The formation of the “Russian” community in Israel. *Yehudei Brit Hamo'atzot Bema'avar* 4(19): 47-66 (Hebrew).
- Lieberman, Evan. 2005. Nested Analysis as a Mixed-Method Strategy for Comparative Research. *American Political Science Review* 99 (3): 435-52.
- March, Raymond J., Conrad Lyford, and Benjamin Powell. Forthcoming. “Causes and Barriers to Increases in Economic Freedom.” *International Review of Economics*.
- Methodology: Freedom in the World 2016*. Freedom House. 2016. Available <https://freedomhouse.org/report/freedom-world-2016/methodology>.
- O'Reilly, Colin, and Benjamin Powell. 2015. “War and the Growth of Government.” *European Journal of Political Economy* 40: 31-41.

- Ortega, Francesc, and Giovanni Peri. 2014. Openness and Income: The Roles of Trade and Migration. *Journal of International Economics* 92: 231-251.
- Powell, Benjamin, and Matt Ryan. Forthcoming. "The Global Spread of Think Tanks and Economic Freedom." *Journal of Private Enterprise*. Forthcoming.
- Razin, Assaf, Efram Sadka, and Phillip Swagel. 2002. Tax burden and migration: A political economy theory and evidence. *Journal of Public Economics* 85:167-90.
- Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi. 2004. Institutions rule: The primacy of institutions over geography and integration in economic development. *Journal of Economic Growth* 9:131.
- Sekhon, Jasjeet. 2004. "Quality Meets Quantity: Case Studies, Conditional Probability, and Counterfactuals." *Perspectives on Politics* 2 (2): 281-93.
- Shindler, Colin. 2008. *A History of Modern Israel*. Cambridge: Cambridge University Press.
- Siegel, Dina. 1998. *The Great Immigration: Russian Jews in Israel*. New York: Berdahn Books.
- Tarrow, Sidney. 1995. "Bridging the Quantitative-Qualitative Divide in Political Science." *American Political Science Review* 89 (2): 471-74.
- Tarrow, Sidney. 2010. "The Strategy of Paired Comparison: Toward a Theory of Practice." *Comparative Political Studies* 43 (2): 230-59.
- van der Vlist, A.J., Daniel Czamanski, and Henk Folmer. 2011. Immigration and Urban Housing Market Dynamics: The Case of Haifa. *The Annals of Regional Science* 47: 585-598.
- Weiss, Yfaat. 2001. The monster and its creator, or how the Law of Return turned Israel into a multi-ethnic state. *Te'oria u-Vikkoret* 19: 45-69.
- Young, A. T., and Bologna, J. 2016. Crises and Government: Some Empirical Evidence. *Contemporary Economic Policy*. 34(2): 234-249.