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ABSTRACT

We are motivated by the unique migration experience of Israel of a supply-side shock triggering skilled immigration and the concurrent decline in welfare-state redistribution. This paper develops a model, which can provide an explanation for the mechanism through which a supply-side shock triggering high-skill migration can also reshape the political-economy balance and the redistributive policies. The paper highlights the differences in the political-economy induced redistribution policies between the cases in which migrants participate in the electoral system and the case where they do not. When migrants are allowed to vote, and they take advantage of this right, then, following the shock, all income groups gain, except low skilled immigrants who lose. When migrants are not allowed to vote, or choose not to participate in elections, all income groups gain, except the skilled migrants who lose.

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I.   Introduction

Following the collapse of the Soviet Union some three decades ago, scores of immigrants (about 20% of the Israeli established population at the time) went to Israel. Relative to the native-born Israelis, these immigrants were poor in wealth, but abundant with skills.[1]

In history, immigrants often shift the balance of politics among ethnic groups, economic classes and age groups, so that they may generate political backlash. However, in Israel, the political backlash has been moderate, whereas the change in the political balance was substantial. Israel's Law of Return grants returnees immediate citizenship and consequently voting rights. An early study by Avner (1975) finds that the voting turnout rate of new immigrants was markedly lower than that of the established population. This means that immigrants did not fully exercise their voting rights and did not therefore influence the political economy equilibrium in Israel, as much as the established population.[2] However, a later study conducted by Arian and Shamir (2002) about voting turnout patters of new immigrants to Israel in the 2001 elections reverses the earlier finding, the new immigrants in this study are predominantly from the Former Soviet Union (FSU). Arian and Shamir find no marked difference in voting turnout rates between the new immigrants and the established population. Immigrants' voting is key to understanding the political-economy mechanism that determines income distribution and redistribution (see Razin, Sadka and Swagel (2002 a, b),

Migration differs from the movement of other factor inputs (such as capital flows) in one fundamental way. Migrants become part of the society of the receiving country, including its evolving culture and politics.[3] A highly developed social welfare system in the receiving country may greatly complicate matters, as emphasized by Razin, Sadka and Swagel (2002b). A related issue is the implications of ageing population for the size of the welfare state; see Razin, Sadka, and Suwankiri (2011). While high skilled and therefore high-wage migrants may be net contributors to the fiscal system, low skilled migrants are likely to be net recipients, thereby imposing an indirect tax on the taxpayer of the receiving country. Sooner or later, then, migrants may shift the balance of politics among ethnic groups, economic classes, or age groups, and reshape the distribution of wealth and disposable income, That is, immigrants influence the size of the welfare state.

Figure 1 depicts the Gini coefficients of the distribution of gross income, disposable income and the difference between which is a measure of redistribution. As the bottom graphs indicates, with

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[1] See Razin (2017, forthcoming).

[2] Messina (2007) and Bird (2011) for Western Europe report a similar migration low-voting turnout pattern for migrants also.

[3] The Swiss playwright put it succinctly: "We asked for workers. We got people".

some lag, the degree of redistribution lessens significantly following the influx of immigration from the former Soviet Union (FSU).

Figure 1: Gini Coefficients: Gross Economic Income, Disposable Income and the Redistribution*, 1979-2015
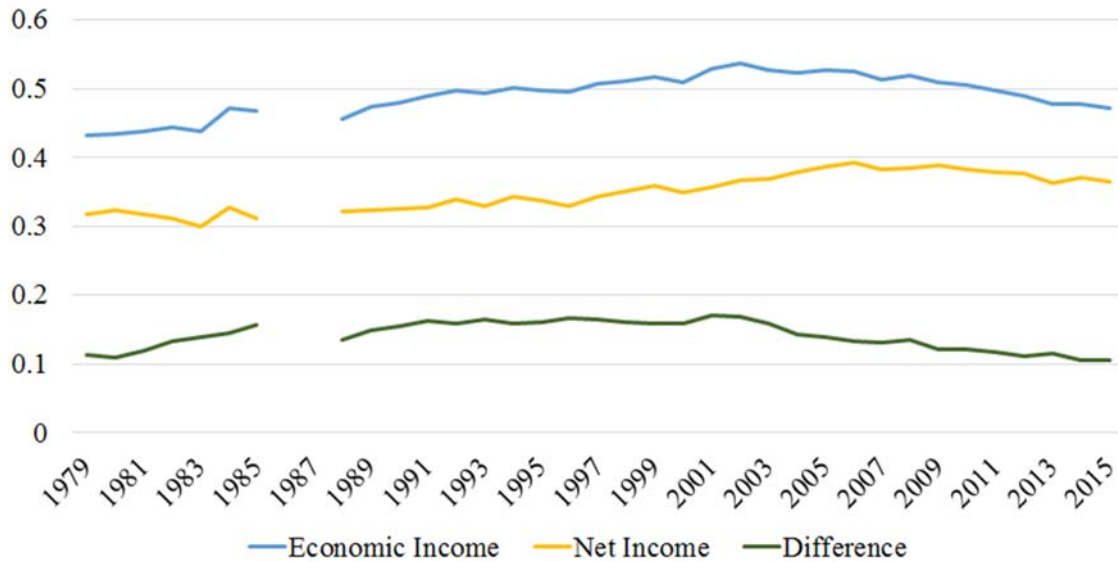
Source: Momi Dahan (2017)

* Redistribution is measured by the gross and disposable income Gini coefficients.

Figure 1 demonstrates a strong rise in income inequality between 1990 and 2003, which is a combination of declining market income inequality, more than offset by and a marked fall in redistribution. The influx of high skilled immigrants can explain these two conflicting trends: A rising middle class thanks to high- skill migration, and a rebalancing political-economy-based income redistribution policy.

The paper aims at developing a formal political-economy mechanism that may explain these phenomena. Specifically, we develop an analytical model in which immigrants voting is key for the explanation of this episode.

The organization of the paper is as follows. Section II describes the model, and Section III presents the political-economy equilibrium. In Section IV, we discuss the redistribution with and without migrant's voting. Section V provides concluding remarks.

II.   The Model

The ingredients of the model are as follows.

II.1 Human Capital Investment

There are just two types of workers: "skilled" (with a symbol S) and "unskilled" (with the symbol U). The wage per unit of labor of a skilled worker is w, whereas an unskilled worker earns a wage of ρw per unit of labor, where $\rho < 1$. All native-born (with a symbol N) are initially unskilled. However, a native-born can acquire education at some cost (c) and becomes skilled. Individuals differ from one another through their cost of education: there is a continuum of native-born individuals, distinguished only by their cost of education. For notational simplicity, we normalize the number of native-born individuals to one. An individual is identified by her cost of education, so that an individual with a cost of c is termed a c-individual. We assume for simplicity that the cost of education is uniformly distributed over the interval $[o, \bar{c}]$.

All native-born individuals are endowed with E units of a composite good, the single good in this economy[4]. All individual inelastically supply one unit of labor. If a c-individual acquires education and becomes skilled, her income[5] is (denoted by I_S^N)

$$I_S^N(c) = (1 - t)w + b + (E - c)(1 + r) \tag{1}$$

Where t a flat wage is tax rate; b is a uniform (lump sum) per capita social benefit; and r is the interest rate – the return to capital. If a c-individual decides not to acquire education and remain unskilled, her income (denoted by I_U^N) is

$$I_U^N = (1 - t)\rho w + b + E(1 + r) \tag{2}$$

(Note that $I_S^N(c)$ depends on c, whereas I_U^N does not)

Thus, there is a cutoff level of cost, c^*, so that all c-individuals with $c \leq c^*$ will choose to become skilled, and all the others (with $c \geq c^*$) will remain unskilled. This c^* is defined by

$$(1 - t)w + b + (E - c^*)(1 + r) = (1 - t)\rho w + b + E(1 + r).$$

Upon some re-arrangement, the cutoff level of the cost of education, c^*, becomes:

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[4] To simplify the analysis, we assumed that E and c are uncorrelated. A possible extension of the model is to assume some distribution of E, which is negatively correlated with c, so that more capable individuals (with low c) have accumulated larger endowments (higher E).
[5] Note that this specification assumes that capital does not depreciate at all.

$$(1 - t)(1 - \rho)w = c^*(1 + r).$$

That is, c^* is solved from the equality between the return to education and its cost. A c^*-individual is just indifferent between acquiring education (and thereby becoming skilled) or staying unskilled. Upon further re-arrangement, c^* is defined by

$$c^* = \frac{(1 - t)(1 - \rho)w}{(1 + r)}. \tag{3}$$

Note that c^* may well exceed E, which means that those c-individuals with c below but close to c^* (which is endogenous) actually <u>borrow</u> in order to acquire education. Naturally, the payoff in terms of the higher wage would more than offset the borrowing cost. For those individuals $E - c$ is negative.

Also, note that we are employing a static framework within which all economic and political processes occur simultaneously with no time dimension.[7] For instance, we do not distinguish between the time in which the education is acquired, and the time when the earnings occur. Similarly, capital earns its return r at the same time it is employed.

The number of c-individuals with $c \leq c^*$ is the number of native-born skilled individuals. Denoting this number by n_S, it follows that

$$n_S = \frac{c^*}{\bar{c}}. \tag{4}$$

Then, the number of native-born unskilled individuals, n_U, is thus given by

$$n_U = 1 - n_S. \tag{5}$$

Aggregate investment in human capital (education), denoted by H, and is then given by

$$H = \int_0^{c^*} c \cdot \frac{1}{\bar{c}} dc = \frac{(c^*)^2}{2\bar{c}}. \tag{6}$$

Therefore, the aggregate stock of physical capital, K, is equal to

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[7] Such a framework is akin to a steady state in a dynamic model with rational expectations.

$$K = E - H. \tag{7}.$$

There are also two types of migrants: the skilled who can earn a wage w in the host country, and the unskilled who earn a wage of ρw in the host country. None of them has any initial endowment. The migrants come to the host country after they have already made and implemented the decision whether to acquire or not acquire education. Thus, it is exogenously given who is skilled and who is unskilled. In other words, the economy benefits from the skilled migrants because it does not have to pay for the cost of investment.

II. 2. Income Groups

The income of skilled and unskilled migrants, respectively, is:
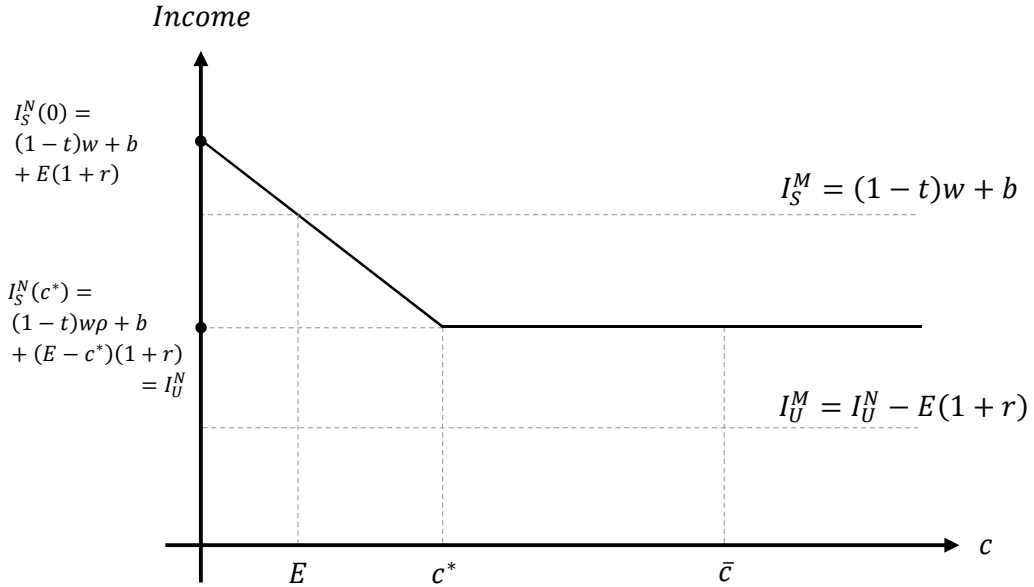
$$I_S^M = (1 - t)w + b \tag{8}.$$

and

$$I_U^M = (1 - t)\rho w + b. \tag{9}.$$

The income of the native-born as a function of c is depicted in Figure 2. Note that $I_S^N(c)$ declines in a straight line until it reaches c^*, where

$$I_S^N(c^*) = (1 - t)w + b + (E - c^*)(1 + r) = (1 - t)\rho w + b + E(1 + r) = I_U^N.$$

The labor income of the unskilled native-born and the unskilled migrants is the same, but the total income of an unskilled migrant which is $(1 - t)\rho w + b$ is definitely below the income of an unskilled native-born, the difference being the capital income enjoyed by the unskilled native-born, namely $E(1 + r)$. The total income of a skilled migrant is definitely higher than the total income of the unskilled migrant, because of the higher wage earned by the skilled, whereas both have no other income. The income of the skilled migrants exceeds the income of the skilled native-born with $c > E$, but falls short of the income of the skilled native-born with $c < E$.

Figure 2: Income Groups and Cost of Education

$$Income$$

$I_S^N(0) =$
$(1-t)w + b$
$+ E(1+r)$

$I_S^M = (1-t)w + b$

$I_S^N(c^*) =$
$(1-t)w\rho + b$
$+ (E - c^*)(1+r)$
$= I_U^N$

$I_U^M = I_U^N - E(1+r)$

c

E c^* $\bar{c}$

The income of a skilled migrant is $I_S^M = (1-t)w + b$, whereas the income of a skilled c-individual is $(1-t)w + b + (E - c)(1+r)$. Therefore, as long as $E - c$ is positive (i.e. the c-individual does not borrow in order to invest in human capital), then$I_S^N(c) > I_S^M$. However, if $E - c < 0$ (i.e. the individual borrows in order to invest in human capital), then the income of the skilled migrant (I_S^M) is greater than the income of the skilled native-born (I_S^N). In sum, we have the following ranking of incomes:

$$I_U^M < I_U^N = I_S^N(c = c^*) < I_S^N(c > E) < I_S^N(c = E) = I_S^M < I_S^N(c < E).$$

II. 3.   Supply of Immigrants

Recall that the country employs an unrestricted migration policy. We envisage an economy that allows any migrants to come. Thus, the decision whether to immigrate or no rests solely with the migrant. Each potential migrant has some reservation income, so that she will migrate if and only if she will be accorded a higher income in the destination country.

Due to various factors (such as skill, family ties, age, etc.) this reservation income is not the same, but there is rather a continuum of such reservation incomes. Distinguishing between the two skills groups, we then assume that there is an upward sloping supply function for each skill group,

depending on the income accorded to immigrants in the destination country. Denoting the number of skilled migrants by m_S, the supply function of skilled migrants is given by an iso-elastic function:

$$m_S = B_S(I_S^M)^{\sigma_S} \tag{10}$$

where B_S and σ_S are some positive parameters. Similarly, the supply function of unskilled migrants is given by

$$m_U = B_U(I_U^M)^{\sigma_U} \tag{11}$$

where m_U is the number of unskilled migrants and B_U and σ_U are some positive parameters.

II. 4. Production and Factor Prices

We employ a Cobb-Douglas production function

$$Y = AK^\alpha L^{1-\alpha}, \quad A > 0, 0 < \alpha < 1 \tag{12}$$

where Y is gross domestic product, A is a total factor productivity (TFP) parameter, and α is the capital-share parameter (and $(1 - \alpha)$ is the labor-share parameter). L is the total labor supply in efficiency units and is given by

$$L = n_S + \rho n_U + m_S + \rho m_U \tag{13}$$

The competitive wage per efficiency unit of labor (w) and the competitive interest rate (r) are given by the marginal productivity conditions

$$w = (1 - \alpha)A\left(\frac{K}{L}\right)^\alpha \tag{14}$$

and

$$r = \alpha A\left(\frac{K}{L}\right)^{1-\alpha}, \tag{15}$$

where we assume for simplicity that capital does not depreciate. We also assume that capital is immobile across countries. This is meant to say that there is some immobile, untradeable factor, such

as for instance land, housing, etc., whose returns are determined in the confines of the domestic economy, and are affected by immigration.

II. 5. The Redistribution System

We employ a very simple system of redistribution. Wages are taxed at a flat rate of t. The revenues are distribution by a uniform per-capita transfer b.

We assume that the migrants qualify for all the benefits of the welfare state, and they are naturally subject to the state taxes. Therefore, the government budget constraint is as follows:

$$twL = b(1 + m_S + m_U) \tag{16}\textbf{.}$$

assuming that the government has no other revenue needs, except for redistribution.[8] Note that it follows from equation (16) that t and b must be of the same sign. A positive wage tax (t) allows the government to accord a positive transfer (b) to all. A subsidy to wages (namely, a negative t) requires the government to impose a lump-sum tax (namely, a negative b) on all. When t and b are positive, the tax-transfer system is progressive. When they are negative, the system is regressive.

III. Equilibrium

With unrestricted migration, the flows of migrants m_S and m_U are determined by the migrants themselves according to their reservation incomes (embedded in the supply functions, (10) and (11), and the income accorded to them in the host country. There are therefore only two policy variables – the tax rate t and the social benefit b. However, as the government is constrained by a balanced budget (condition (16)), it follows that there is essentially only one policy variables; once t is chosen, all the other economic variables are determined in equilibrium, including the tax revenue (twL), the number of migrants (m_S and m_U), and b. Or, alternatively, once b is chosen, all the other economic variables are determined in equilibrium.

Choosing t as the single policy variable, we note that there remain 15 endogenous variables –

$$w, \ b, \ r, \ c^*, \ I_S^M, \ I_U^M, \ n_S, \ n_U, \ I_U^N, \ m_S, \ m_U, \ H, \ K, \ Y, \ L.$$

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[8] One may wonder why there is no tax on the initial endowment (E). In a distortive. However, in a dynamic setting, which we preferred to mimic in a static framework, E represents accumulated savings, and taxing it will be distortive. Furthermore, because all native-born possess the same initial endowment, taxing it in our static model does not distribute income across native-born income groups; but taxing E amounts to transferring income from the native-born to the migrants static model such a tax is not.
[8]

There are also 15 equations in the model, (2) – (16), from which the endogenous variables are solved. In addition, the income of the skilled native-born, which depends on their education cost, is given by the function defined in equation (1).

IV.   Redistribution with and without Migrants' Voting

As explained in the introduction, we aim at studying the effect of migration on the progressivity of the welfare state, and the resulting distribution of disposable income. This depends on the skill composition of migrants and the extent of their integration in the political system that is whether or not they participate in the electoral process. We consider the extreme cases: Case (a) when migrants do not participate in elections; Case (b) when they fully do. For each of these two cases, we also study how a skilled migration shock affects the political economy equilibrium and the ensuing functional and size distribution of income. For this, we resort to numerical simulations.

The policy variable is chosen by a natural (and plausible) version of a majority voting.

Case (a): Migrants do not vote

In this case, the political equilibrium is rather straightforward. Note that if a c_0-individual would like to raise t, then all c-individuals with $c \geq c_0$ (whether skilled or unskilled) would certainly support such a move. This means that the distribution of the voters over the most preferred t is single-peaked. Hence, the t that will be chosen in equilibrium is the median voter's most preferred t.

Note that the story of the immigration to Israel from the former Soviet Union described in the introduction is characterized by the immigrants being on average more skilled than the native-born. To focus on this feature we considered the case where

$$\frac{\bar{c}}{z} > c^*,$$

that is the median native born is unskilled.

Then the median voter is also an unskilled native-born (for ρ sufficiently large, this will indeed be the case). Then the equilibrium t will be at the (endogenously determined) Laffer point. The equilibrium is described in row (a)(1) in Table 1.

Now suppose that there is a skilled migration-supply shock. Specifically, B_s rises exogenously from 1.2 to 8.2,, whereas B_u is kept unchanged. Note that as immigrants do not vote, the identity of the median voter does not change. As expected, the wage per efficiency unit falls, and the interest rate rises.

The policy becomes more progressive. Both t and b rise. Note that the skilled-migration shock is strong, and the number of skilled migrants (m_s) rises sharply' even though their income (I_s^M) falls. The fall in their income stems from both a decline in the tax (t), which is somewhat offset by the rise in the transfer (b).

In fact, the median voter, who is an unskilled native-born and as such a net beneficiary of the welfare state, encourages a flux of skilled migrants in order to "exploit" these net fiscal contributors to the welfare state. Indeed, the tax rate raised, and more importantly, the social benefit (b) rises significantly. Interestingly, all skilled and unskilled native-born are better off as a result of this supply-side shock of skilled migrants. Note that native-born unskilled benefit mainly because both the interest rate (π) rises (and they save all of their initial endowment), and the transfer (b) is more generous.

Table (1)(a) suggests also that the average income of the native-born skilled ($\bar{I}_s^N$) rises. It is worth pointing out that <u>all</u> skilled native-born (regardless of their cost of education, c) are better off. By revealed preferences, the income of every skilled native-born is at least as high as that of an unskilled native-born, because a skilled person could have chosen to stay unskilled.

Case (b): Migrants vote

Suppose now that migrants do vote. Formally, everything takes place in one point in time, as the model is static. That is, migration, education, and voting decisions, and the resulting factor incomes are all made simultaneously with the voting decisions, so that voting decisions are made while taking into account the effects of the voting outcome on immigration and all other variables, and vice versa[9].

The equilibrium is determined as follows:

Upon observation, we can see from equations (2) and (9) that the direct effect of the tax-transfer policy on the incomes of the unskilled native-born and the unskilled migrants is the same, and works through the net wage income $(1-t)\rho w + b$. For the unskilled migrant this is the only effect of the tax-transfer system. However, for unskilled native-born, there is also an indirect effect through capital income $E(1+r)$ (note that r depends on t). However, our calculations indicate this indirect effect is of a second-order magnitude compared to the direct effect.

Similarly, upon observation of equations (1) and (2), we can see that the direct effect of the tax-transfer policy on the incomes of the skilled native-born and the skilled migrants is the same and works

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[9] We are essentially assuming a perfect foresight. In a dynamic model, it is important to specify the sequencing of decisions. In our static model, the simultaneous determination of all variables may be viewed as a steady state of some dynamic setup.

through the net wage income $(1 - t)w + b$. Here again, there is also and indirect effect on the income of the skilled native-born (but not on the income of the skilled migrants) through the capital income $(E - c)(1 + r)$. Again, our calculations suggest that the indirect effect is of second-order magnitude.

Thus, all unskilled (both native-born and migrants) are affected by the tax-transfer policy mainly through $(1 - t)\rho w + b$, whereas all skilled (both native-born and migrants) are affected mainly by $(1 - t)w + b$. It is therefore natural that all the unskilled whose wage is only ρw would rather prefer to tax wage income and take advantage of all the skilled whose wage, w, is higher. Thus, the most preferred policy of the unskilled entails a positive tax and a positive transfer. Therefore, if the unskilled (both native-born and migrants) constitute a majority, then the political economy equilibrium tax and transfer will be positive – a progressive tax-transfer system. However, due to the indirect effect which applies only to the unskilled native born, the most-preferred tax and transfer policy is not necessarily the same for the unskilled native-born and the unskilled migrants. Therefore, the tax-transfer policy chosen is the most-preferred policy by the larger of the two sub-groups (the unskilled native-born or the unskilled migrants).

Similarly, the skilled (both native-born and migrants whose wage is higher than the unskilled) would opt to grant a subsidy to the wage, financed by a lump-sum tax. That is, they opt for negative t and b – a regressive tax-transfer policy. In this case too, there is also an indirect effect which applies only the skilled native-born. Thus, the most-preferred tax-transfer policy is not the same for the two sub-groups of skilled native-born and skilled migrants. In this case, too we postulate that the political-economy tax-transfer policy is the most-preferred policy of the larger sub-group.

Note that indirect effect of the tax-transfer policy which works through the capital income $(E - c)(1 + r)$ is not the same for all members of the skilled native-born sub-group (because it depends on c). In this case, we assume that the median voter within this group prevails.

As before, we start with $B_S = 1.2$, and parameter values that entail the unskilled (both native-born and migrants) as a majority: $x_U + m_U > x_S + m_S$. This is described in row (b)(1) of table 1. As predicted, the political-economy tax-transfer policy is progressive: t and b are positive. Also, the unskilled native-born form a majority of the unskilled: $x_U > m_U$.

Figure 2: The Effect of a Supply Shock of Skilled Migration
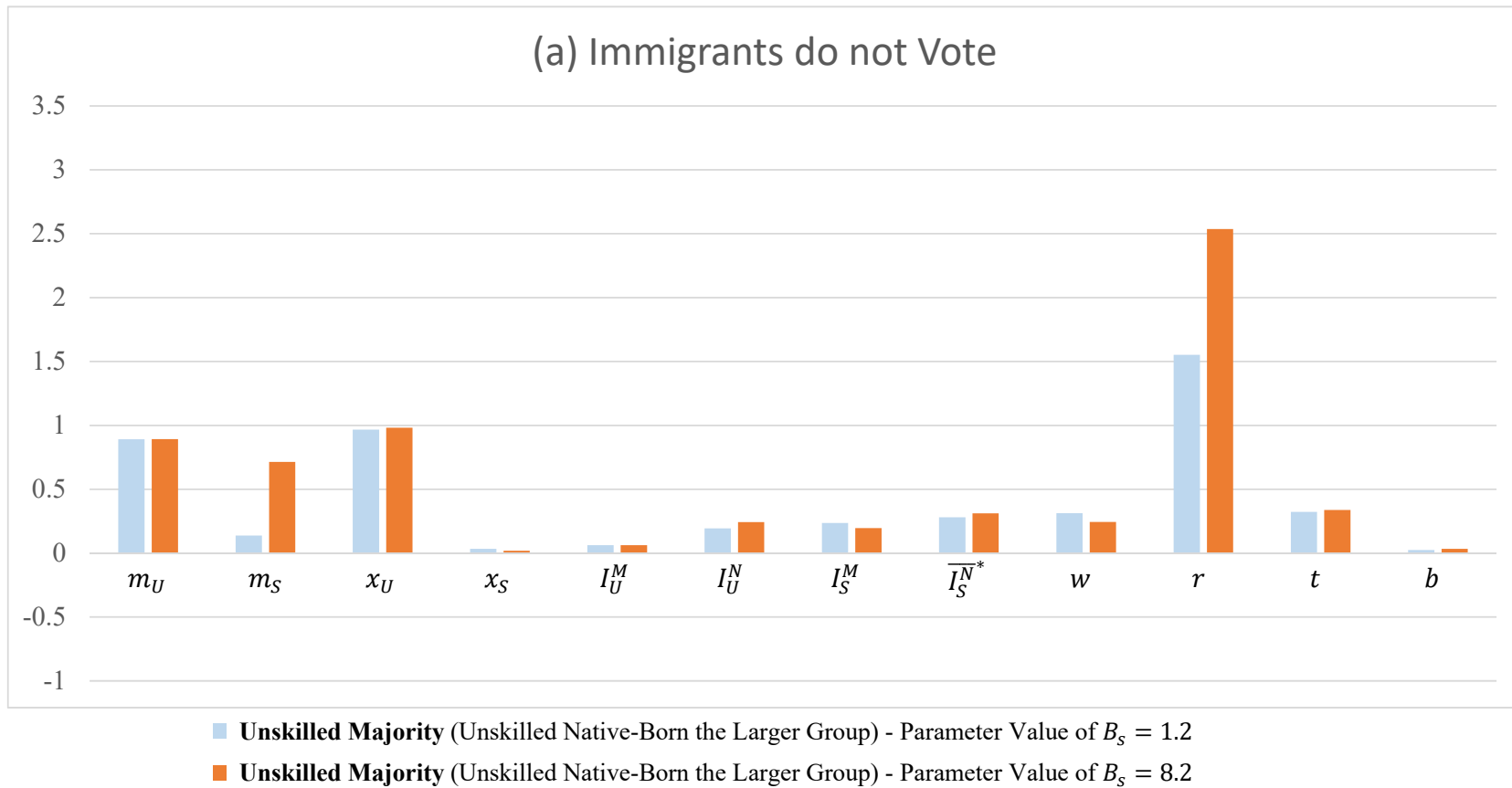
(b) Immigrants do Vote
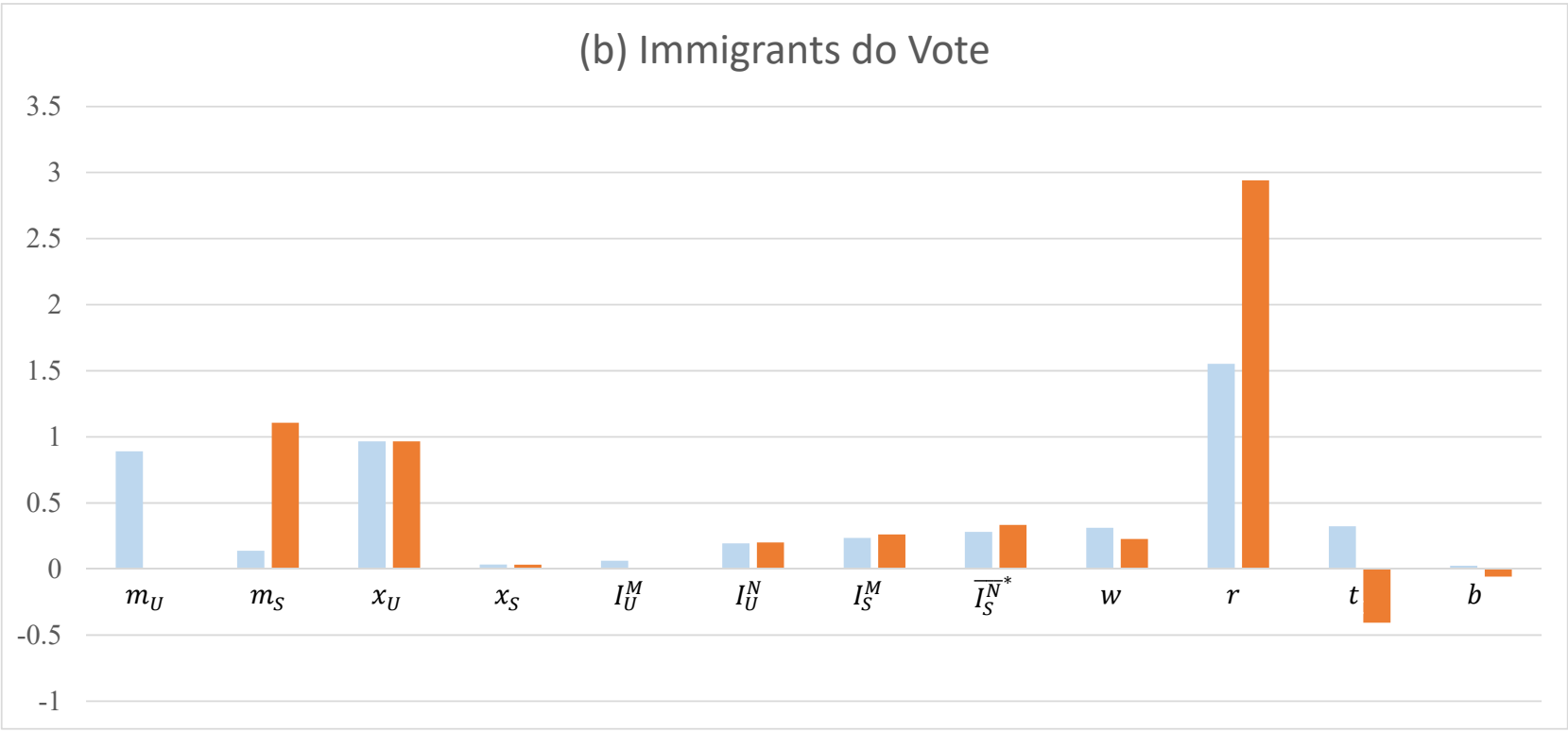
■ **Unskilled Majority** (Unskilled Native-Born the Larger Sub-Group) - Parameter Value of $B_s = 1.2$

■ **Skilled Majority** (Skilled Migrants the Larger Sub-Group) - Parameter Value of $B_s = 8.2$

Table 1: The Effect of a Supply Shock of Skilled Migration: (a) Immigrants do not Vote, (b) Immigrants do Vote

	m_U	m_S	x_U	x_S	I_U^M	I_U^N	I_S^M	$\overline{I_S^N}$ *	w	r	t	b
Immigrants do not Vote												
Case (a)												
(1) Unskilled Majority (Unskilled Native-Born the Larger Group) Parameter Value of $B_s = 1.2$	0.8909	0.1380	0.9660	0.0339	0.0632	0.194	0.236	0.281	0.312	1.553	0.3234	0.0252
(2) Unskilled Majority (Unskilled Native-Born the Larger Group) Parameter Value of $B_s = 8.2$	0.8917	0.7138	0.9811	0.0188	0.0633	0.244	0.196	0.311	0.245	2.537	0.3382	0.0341
Immigrants Vote												
Case(b)												
(1) Unskilled Majority (Unskilled Native-Born the Larger Sub-Group) Parameter Value of $B_s = 1.2$	0.8909	0.1380	0.9660	0.0339	0.0632	0.194	0.236	0.281	0.312	1.553	0.3234	0.0252
(2) Skilled Majority (Skilled Migrants the Larger Sub-Group) Parameter Value of $B_s = 8.2$	0	1.1059	0.9666	0.0333	0	0.202	0.262	0.334	0.228	2.940	-0.4058	-0.0577

Note: In both case (a)(1) and case (b)(1) the unskilled native born is the decisive voter; in case (b)(2) the skilled migrant is the decisive voter; in case (a)(2) the unskilled native born is the decisive voter. Since the income of the native skilled population is not constant but a linear function of an individual's c, we report this group's average income. Other (Common) Parameter Values:

$$B_U = 56, \rho = 0.18, \bar{c} = 2, E = 0.05, \alpha = 0.33, \sigma_S = \sigma_U = 1.5, A = 1$$

We then contemplate a skilled migration supply shock that is we keep all other parameter values constant and increase the parameter value of B_S. From 1.2 to 8.2 (as in case (a)). The results we described in Figure 2 (a,b) and in row (b)(2) of Table 1. This supply-side shock triggers a wave of skilled migration. The results are shown in the second row of Table 1. The number of migrants (m_S) rose sharply. As a result, the skilled constitute now the majority: $x_S + m_S > x_U + m_U$. Also, the skilled migrants form the larger of the two skilled sub-groups, (i.e. $m_S > x_S$) and their most-preferred tax-transfer becomes now the political-equilibrium tax-transfer policy. As predicted, the political-economy tax-transfer policy becomes now regressive: t and b are negative. Furthermore, the politically dominant sub-group of skilled migrants drives out all unskilled migrants ($m_U = 0$), by according them zero income ($I_U^M = 0$). As skilled labor is assumed a perfect substitute of unskilled labor, the group of skilled migrants have no need for the unskilled migrants who pose a fiscal burden and therefore drive their number and income to zero. Noteworthy, the unskilled native-born were initially the politically dominant sub-group and dictated their most-preferred progressive tax-transfer. Following the supply-side shock of skilled migration, the unskilled native-born lose their dominance to the skilled migrants who are now dictating their most-preferred regressive tax-transfer policy. Nevertheless, the unskilled native-born are better off, because the return to their capital income (namely, r) rises.

The comparison between the two cases is insightful. When not given the right to vote, the supply-side shock of skilled migration (case (a)) renders the fiscal system more progressive. By contrast, when the migrants have the right to vote (which they fully exercise), they cause the fiscal system to be regressive. Noteworthy, when they are not allowed to vote, the skilled migrants lose and all other income groups gain. When they are allowed to vote it is the unskilled migrants who lose, and all other income groups gain.

The model therefore help explain what is shown Figure 1: a rise in income inequality between 1990 and 2003, which is a combination of declining market income inequality and a more than offsetting fall in redistribution. The influx of high skilled immigrants can explain both: A rising middle class and a rebalanced political economy based income redistribution policy.

V.   Concluding Remarks

This paper develops a model, which can explain the mechanism through which a supply-side shock of skilled immigration, alter substantially political economy based policies. In particular, we show that when migrants do not vote, the fiscal system becomes more progressive. When they do vote, the fiscal system becomes less progressive. In both cases, the native-born gain.

The paper comprises of a static model. The dynamics of the interactions between immigration and income redistribution need further research.

References

Arian, Alan, and Michal Shamir. 2002. "Abstaining and Voting in 2001." In *Elections in Israel-2001*, edited by Alan Arian and Michal Shamir, 150-175. Tel Aviv: Israel Democracy Institute.

Avner, Uri. 1975. "Voter Participation in the 1973 Election." In *Election in Israel-1973,* edited by Alan Arian, 203-218. Tel Aviv: Academic Press.

Bird, Karen. 2011. "Voter Turnout among Immigrants and Visible Minorities in Comparative Perspective." In *The Political Representation of Immigrants and Minorities: Voters, Parties, and Parliaments in Liberal Democracies*, Edited by Karen Bird, Thomas Saalfeld and Andreas M. Wuest, 51-76. London: Routledge/ECPR

Dahan, Momi. 2007. "Why Has the Labor-Force Participation Rate of Israel Men Fallen?" *Israel Economic Review* 5 (2): 95-128

Dahan, Momi 2017. "Income Inequality in Israel: A Distinctive Evolution."

Messina, Anthony M. (2007). *The logics and politics of post-WWII migration to Western Europe*. Cambridge University Press.

Razin, Assaf (2017 forthcoming). *Israel and the World Economy: Power of Globalization,* MIT Press.

Razin, Assaf & Efraim Sadka (1993). *The economy of modern Israel: Malaise and promise*. University of Chicago Press.

Razin, Assaf, and Efraim Sadka (2014). *Migration States and Welfare States: Why is America Different from Europe?* Palgrave-Macmillan.

Razin, Assaf, Efraim Sadka, and Phillip Swagel, 2002a. "The Aging Population and the Size of the Welfare State"*, Journal of Political Economy* 110 (August): 900-918.

Razin, Assaf, Efraim Sadka, and Phillip Swagel, 2002b. "Tax Burden and Migration: A Political Economy Theory and Evidence." *Journal of Public Economics* 85 (2): 167-190.

Razin, Assaf, Efraim Sadka, and Ben Suwankiri (2011). *Migration and the Welfare State:*

Political-Economy Policy Formation MIT Press.