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The welfare state and migration: A dynamic analysis of political coalitions

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ABSTRACT

We develop a dynamic political–economic theory of welfare state and immigration policies, featuring three distinct voting groups: skilled workers, unskilled workers, and old retirees. The essence of *inter*- and *intra*-generational redistribution of a typical welfare system is captured with a proportional tax on labor income to finance a transfer in a balanced-budget manner. We provide an analytical characterization of political–economic equilibrium policy rules consisting of the tax rate, the skill composition of migrants, and the total number of migrants. When none of these groups enjoy a majority (50 percent of the voters or more), political coalitions will form. With overlapping generations and policy-determined influx of immigrants, the formation of the political coalitions changes over time. These future changes are taken into account when policies are shaped.

1. Introduction

Milton Friedman reminded us that one cannot have free immigration and a generous welfare state at the same time. Indeed, public opinion in the developed economies with a fairly generous welfare system, favors putting in some way or another restrictions on immigration. A skilled and young immigrant may help the finances of the welfare state; whereas an unskilled and old migrant may inflict a burden on the welfare state. A welfare state with a heterogeneous population, by both age and skills, does not evidently have a commonly accepted attitude towards migration. Hence, this paper develops a framework to study how these inter- and intra-generational conflicts, among different age and skill groups, are resolved in a politico-economic setup. Of a particular interest is how an economy with more than just two groups of voters resolve the conflicts between more demand for welfare state redistribution and the skill composition of immigration policy. The basic trade-off presented in the paper is as follows: skilled immigrants are helpful in contributing to paying for the welfare state, but their influx could upset the future coalition between unskilled and old individuals that supports redistribution.

To emphasize this trade-offs, our model features two skill levels for labor, skilled and unskilled. People live for two periods in an overlapping-generations manner, which provides another dimension of heterogeneity, between young and old individuals, in addition to the skill levels. The voting on the current migration policies and the generosity of the welfare state

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takes place in each period. We model a typical welfare state that is characterized by both *inter*-generational redistribution and *intra*-generational redistribution.[1] Accordingly, our overlapping generations model is further based on key demographic characteristics: that immigrants are younger and have higher birth rates than the native born population.

Our paper is directly related to two fields of the existing political economy literature: the political economy of the pay-as-you-go (PAYG) social security systems (Cooley and Soares, 1999; Boldrin and Rustichini, 2000; Bohn, 2005; Bassetto, 2008) and the political economy of migration (such as Benhabib, 1996; Ortega, 2005). The view that increased migration may come to the rescue of PAYG social security systems reflects the fact that the flow of migrants can alleviate the current demographic imbalance as well, by influencing the age structure of the host economy. A few empirical studies address this point by calibrating the equilibrium impact of a less restrictive policy towards migration according to U.S. data. Storesletten (2000) found in a general equilibrium model that selective migration policies, involving increased inflow of working-age high and medium-skilled migrants, can remove the need for a future fiscal reform. Auerbach and Oreopoulos (1999) performed a similar exercise using *partial* equilibrium generational accounting and arrived at a similar conclusion. By emphasizing the demographic side and abstracting from the migrants' factor prices effects, Lee and Miller (2000) concluded in a similar analysis that a higher number of immigrants admitted into the economy can ease temporarily the projected fiscal burden of retiring babyboomers. There are also a another line of literature which deals with the effect of migrants on the PAYG social security system, such as Razin and Sadka (1999) and Scholten and Thum (1996). However, this literature abstracted from political–economic considerations.

Moreover, there have been previous works on the political economy of immigration and redistribution policies, albeit focused solely on either inter-generational or intra-generational alone. Razin et al. (2002b), and Casarico and Devillanova (2003) focused on the impact of immigration the political economy of inter-generational redistribution. Sand and Razin (2007) took an additional step to provide a synthesis on the political economy model jointly determining the inter-generational redistribution and immigration. Dolmas and Huffman (2004) analyzed similarly the joint determination of intra-generational redistribution and immigration policy in a dynamic political economy model. None of the works in the literature capture both *inter*- and *intra*-generational redistribution in their studies. Once we incorporate this central feature into the model, we find that the formation of the political coalitions between groups of voters changes over time, which in turn influences how future policies are shaped.

Following a line literature of dynamic political–economic models, we employ the Markov-perfect equilibrium concept, as in Krusell and Rios-Rull (1996), and Hassler et al. (2003) and Bassetto (2008). Similar to Hassler et al. (2003) and in contrast to Krusell and Rios-Rull (1996) and Bassetto (2008), our model yields analytical closed-form solutions in political–economic equilibrium, making it highly attractive for further quantitative and qualitative analyses. The forward-looking equilibrium concept means that each young voter takes into account the effect of her vote on the evolution of the economy into the next period; which, in turn, affects the voting outcome in the next period, particularly with respect to the social security benefit that she receives in the next period, when she grows old and retires. Next period voting, in turn, is influenced by the outcome of the voting outcome in the following period, and so on. Since a welfare state will necessarily affect more than two groups of voters, of particular interest is the characterization of possible coalitions which emerge as decisive in the political–economic equilibria, for different demographic and skill-distribution parameters. In this regard, we depart from the typical literature markedly whose focus was mainly on the conflict between only two groups: either young versus old voters (for example, Boldrin and Rustichini, 2000; Sand and Razin, 2007), or skilled versus unskilled voters (see for example Hassler et al., 2003; Dolmas and Huffman, 2004; Armenter and Ortega, 2011).

The paper is organized as follows. Section 2 presents the analytical framework. Section 3 characterizes the political process and defines the concept of equilibrium. Section 4 provides a preliminary analysis of the political equilibrium. Section 5 provides a full analysis of the political–economic equilibrium. Lastly, Section 6 concludes.

2. The model

Consider a standard two-period, overlapping-generations model. Each cohort works in the first-period in his life and retires in the second. There are two skill types: skilled and unskilled. The welfare-state[2] is modeled simply by a proportional tax on labor income to finance a lump-sum benefit (demogrant) period-by-period in a balanced-budget manner.[3] With this setting, the simple welfare-state system is quite redistributive.

[1] Many features of the welfare state, such as national health insurance, involve both inter- and intra-generational redistributions, while some features of the welfare state are also either *inter*- or *intra*-generational, such as old-age social security and income maintenance program.

[2] We draw on Sand and Razin (2007) and Suwankiri (2009).

[3] The lump-sum benefit is perfectly substitutable to private consumption. One can also extend the analysis in a straightforward manner to have public services (e.g. education, health) which are not perfectly substitutable to private consumption.