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Competition for migrants in a federation: Tax or transfer competition? ☆

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ABSTRACT

This paper provides an analysis of competition for migrants. Competing in taxes (transfers) renders migration flows less (more) elastic with respect to changes in fiscal policy. Jurisdictions with aligned preferences (i.e. jurisdictions that maximize the interest of the same type of households, either mobile or immobile households) prefer to reduce the competitive pressure and compete in taxes. Jurisdictions with distinct preferences, on the other hand, prefer to expose themselves to more competitive pressure and compete in transfers. This paper offers insights into the optimal use and design of transfers and helps interpret existing empirical evidence.

1. Introduction

The creation of the European Union (EU) and, in particular, the 1992 Single Market Initiative have lowered the costs of migration between EU member states. The recent EU Eastern Enlargement has contributed to this trend and has led to non-negligible migration flows to core EU member states.[1] Similarly, immigration to the United States (US) and, in particular, low-skilled immigration from Mexico is significant in scale and the associated economic and fiscal consequences are controversially debated in US politics.[2] Looking at the local level, mobility of households might be even more pronounced between central cities and their suburban communities as well as between larger cities compared to international mobility, possibly resulting in spatial sorting of skills within a city and across cities (Bacolod et al., 2009; Eeckhout et al., 2013, for instance).

Migration flows influence public policies at the city, county as well as country level. Most notably, migration and tax-transfer systems are inherently intertwined. Migrants decide on the jurisdiction of residence also by considering how generous social assistance payments are and how heavily the government taxes market incomes.[3] This provides incentives for jurisdictions to compete in these fiscal instruments to attract beneficial migrants and to limit undesirable welfare migration.[4] Presumably, depending on whether governments view high-income or low-income earners as the more relevant group of potential migrants for the jurisdiction, they might well compete in taxes or transfers, thereby using taxes and transfers in different ways to strategically influence migration

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[1] See, e.g., Dustmann et al. (2010) for an evaluation of immigration flows from the recent EU accession countries to the United Kingdom (UK). The share of immigrants from accession countries as a proportion of the UK working-age population had increased from 0.01% to 1.3% by the beginning of 2009. As for stocks of immigrants, Peri (2008) reports that the share of immigrants as a percentage of the native population on average is 5% in EU15 countries. The corresponding numbers for classical immigration countries are 27.5% (Australia), 19.1% (Canada), 23% (Switzerland), and 13.5% (US).

[2] See Borjas and Katz (2007) and Chiquiar and Hanson (2005) for a discussion of the effects of immigration on the US economy.

[3] Empirical evidence on welfare-induced migration is provided in Borjas (1999), Gelbach (2004), Schmidtheiny (2006), McKinnish (2007), Fiva (2009) and Peri (2009), among others. For instance, Schmidtheiny (2006) shows that income taxes of the city of Basel in Switzerland and its suburban communities influence residential choices of households. Fiva (2009) shows that Norwegian local welfare spending has substantial effects on migration.

[4] Migration competition links tax and transfer levels across jurisdictions. For instance, Figlio et al. (1999) and Saavedra (2000) estimate the interdependence of welfare benefits among US states. They find that welfare benefits are positively related to the benefit levels in neighboring states. This is consistent with the notion that migration provides a downward pressure on welfare spending. See Brueckner (2000) for a review of the literature, also summarizing estimates of earlier empirical studies for the US.

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flows. Little is known about the motivation of governments to compete in taxes or transfers or, more generally, to compete in taxes that are levied on immobile households and taxes that are levied on mobile households (referred to as transfers in this paper). This paper tries to fill the gap.

The paper not only characterizes the level of taxes and transfers and their efficiency implications in migration competition (as in previous literature), but also in which of the two fiscal variables governments compete for migrants. Competition in taxes or transfers arises endogenously and the precise form of competition depends on which interest dominates government policy-making. We show that when governments have aligned preferences, presenting the interest of either mobile or immobile households living within their jurisdictions, then jurisdictions compete in taxes. Key to the result is that the migration elasticity is felt differently by governments under tax and transfer competition. In particular, it is lower when taxes are optimized and thereby pre-committed. In this environment, transfers to mobile households increase residually when households emigrate to fiscally more attractive jurisdictions which keeps some of the potentially migrating households in the jurisdiction. To see how this influences government behavior, consider that high-skilled households are immobile while low-skilled households are mobile and form the politically-decisive group of voters.[5] Since low-skilled income is decreasing in the inflow of low-skilled migrants (due to decreasing marginal factor productivity), governments prefer a situation in which migration flows adjust less elastically in response to higher transfer payments to low-skilled households. They opt for tax competition. A reversed mode of competition emerges when preferences are distinct across jurisdictions. To grasp the intuition, let's assume two jurisdictions are competing for migrants. One jurisdiction promotes the interest of low-skilled households while the other advances the interest of the high-skilled population. Unlike low-skilled households, high-skilled households welcome low-skilled migrants since they boost their incomes (due to complementarity in production). Transfer competition serves both jurisdictions' interest. The higher migration elasticity incentivizes the jurisdiction which focuses on high-skilled households to attract more migrants. The corresponding outflow of low-skilled migrants from the other jurisdiction increases per-capita income of the low-skilled population in that jurisdiction.

Understanding the type of competition governments opt for is crucial for the design of corrective grants that upper-level governments use to correct suboptimal policies of competing lower-level governments. Transfer competition will lead to larger inter-state fiscal externalities. The matching rate of the Pigouvian grant should correspondingly be adjusted to prevent an 'under-correction' of externalities. Furthermore, if there is no central authority, jurisdictions may adopt unilateral policies to control migration.[6] These 'migration-purchase' policies might become ineffective in influencing migration flows when policy makers erroneously judge the form of competition in which neighboring jurisdictions engage. The result is helpful in interpreting conflicting evidence on whether transfers (development aid) to low-income jurisdictions are less effective in controlling migration flows compared to remittances (see Xenogiani, 2006, for a review).

The results are of particular relevance for metropolitan cities. Larger cities equally compete for migrants and in many countries the set of instruments cities use to compete for migrants includes income taxes.[7] Interestingly, the nature of complementarities of skills of mobile households might be extreme in metropolitan cities in the sense that only very high-skilled workers and low-skilled workers are complementary in production (e.g., see Eeckhout et al., 2013, for evidence for US cities). With extreme-skill complementarity, low-skilled workers might well outnumber high-skilled workers and dominate the interest of metropolitan city governments. Using the insights of this paper, they will compete in taxes, i.e. the instrument that is levied on the less mobile skill type. This is beneficial to low-skilled workers either because it makes other cities fiscally less attractive for high-skilled workers (when high-skilled workers are relatively more mobile) or because it makes the own city less attractive to low-skilled workers (when low-skilled workers are relatively more mobile).

1.1. Literature review

The issue of how migration influences policy choices has been widely analyzed in the literature. Existing studies focus on the effect of migration on the level of taxes and transfers and the associated redistributive and efficiency implications (e.g., Epple and Romer, 1991; Wildasin, 1991; Janeba and Raff, 1997; Cremer and Pestieau, 1998; Hindriks, 1999; Razin et al., 2002; Glazer et al., 2008).[8] This literature does not analyze the type of competition governments opt for as it assumes that governments compete in either taxes or transfers. Wildasin (1989) and Koethenbuerger (2011) look at the type of competition governments engage in. However, they do not consider the behavior of governments in the presence of migration, the inherent role of heterogeneous policy preferences and to how strategic behavior may undermine the effectiveness of well-established policy tools. In particular, Wildasin (1989) and Koethenbuerger (2011) adopt a representative agent model in which non-aligned policy preferences, which are crucial for the results of this paper, cannot emerge. Furthermore, Wildasin (1989) assumes capital to be mobile, while Koethenbuerger (2011) assumes resources to be immobile. In both contributions, migration behavior and its interplay with policy formation cannot be addressed. Although the formal apparatus is related to the work of Wildasin and Koethenbuerger (who extend the conventional policy formation framework by an additional decision stage at which the strategic fiscal instrument is chosen), the results and the policy implications are new.

The observation that the policy objective of governments influences the structure of fiscal policies and the induced migration outcomes conforms with previous literature. For instance, Mansoorian and Myers (1997) show that the efficiency of migration competition depends on the type of metric the government uses for the evaluation of fiscal policies.[9] The implications of the governments' policy objectives for the type of fiscal competition (tax vs. transfer competition) have not been established yet.

Cremer and Pestieau (1998) and Cremer and Goulão (2011) analyze competition in social insurance systems when benefits might be uniform (Beveridgean system) or related to income (Bismarckian system). They assume that taxes are strategically set and transfers adjust residually. Interestingly, they look into the strategic choice of the type of social insurance (Beveridgean vs. Bismarckian). For instance, Cremer and Goulão (2011) show that when a government is only interested in insuring low-income households against income shocks, it may strategically choose to deviate from

[5] In the formal analysis, we will formulate the model in a general way, only distinguishing between two mobility classes and allowing for any type of relation between mobility and political decisiveness within a jurisdiction and across jurisdictions.

[6] For instance, transfer payments between EU member states may be interpreted in this way. EU structural funds are intended to increase per-capita income in low-income regions in the EU, see Boldrin and Canova (2003). Thereby, the funds potentially limit migration flows to high-income regions. The same type of reasoning is likely to apply to equalization transfers within a federation (such as Australia, Canada and Germany, for instance) and, more broadly, to development aid. See, e.g., Myers (1990) for a theoretical treatment of voluntary 'migration-purchase' policies.

[7] For example, lower-level governments in Sweden, Switzerland and US states, which are dominated by larger cities, levy income taxes.

[8] See Cremer and Pestieau (2004) for a review of the literature.

[9] Boadway (2004) provides a discussion of the literature.