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Dynamic fiscal competition: A political economy theory

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ABSTRACT

I develop a political economy theory of dynamic fiscal competition via public spending and debt. With internationally mobile capital, strategic policies generate two cross-border externalities that voters in each country fail to internalize: (1) an increase in public spending that bolsters capital accumulation but also (2) a race to the top in public debt which crowds out capital. The relative size of these two externalities varies with the number of financially integrated countries and interacts with the domestic political conflict between young and old voters. Despite residence based taxation, capital tax rates are lower under strategic policies than under coordination. Furthermore, they may decline with financial integration. Strategic policies lead to lower long run output and welfare relative to coordination but are preferred by subsequent generations of voters if the number of financially integrated countries is low or the political weight of the young is high.

1. Introduction

The process of financial liberalization spreading across high income democracies during the last decades (Fig. 1a) has far reaching yet not fully understood implications for public finance: How does international capital mobility change the political economy of domestic fiscal policies? What is the scope for international policy coordination given electorally motivated, short-termist governments? What are the effects of fiscal cross-border externalities on welfare and growth?

The significant decline in statutory capital tax rates (Fig. 1b) is a well known correlate of financial liberalization. Moreover, recent empirical research (e.g. Devereux and Griffith, 1998; Redoano, 2003; Bénassy-Quéré et al., 2007) has shown that international capital flows respond not only to tax rate differentials but also to public spending outlays, such as infrastructure investments, research and development or public services. While recent literature (e.g. Rodrik, 1997, 1998; Epifani and Gancia, 2009) has traced the overall increase in public spending in open economies (Fig. 1c) back to strategic trade and redistribution considerations, it has left the issue of fiscal competition for mobile factors largely out of focus. Finally, in this context, the simultaneous build-up of public debt in developed countries (Fig. 1d), suggests strategic fiscal policies may also have important welfare effects via the intertemporal government budget constraint.

Although these stylized facts point to the importance of considering multidimensional and dynamic fiscal competition, the theoretical literature, building on the seminal work of Zodrow (1986) and Wilson (1986), has so far devoted little attention to the strategic use of multiple fiscal policy variables and their political economy in a dynamic setting.

The paper contributes to the literature by providing a tractable framework to study strategic fiscal policies chosen by subsequent generations of voters through repeated elections in a world where capital is internationally mobile.[1] Specifically, I build a multi-country dynamic general equilibrium model with productive public spending and debt and study the interactions between countries that share an integrated capital market but retain independence of their policies. Countries are assumed to be large, i.e., they take into account their effect on the interest rate. Each country is inhabited by overlapping generations of two-period lived agents. Current generations in each

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[1] I use the notion of strategic fiscal policies to refer to the cross-border externalities induced by mobile capital. Nonetheless, as explained later on, elected governments also behave strategically in an intertemporal sense, by steering the policy of future domestic governments.

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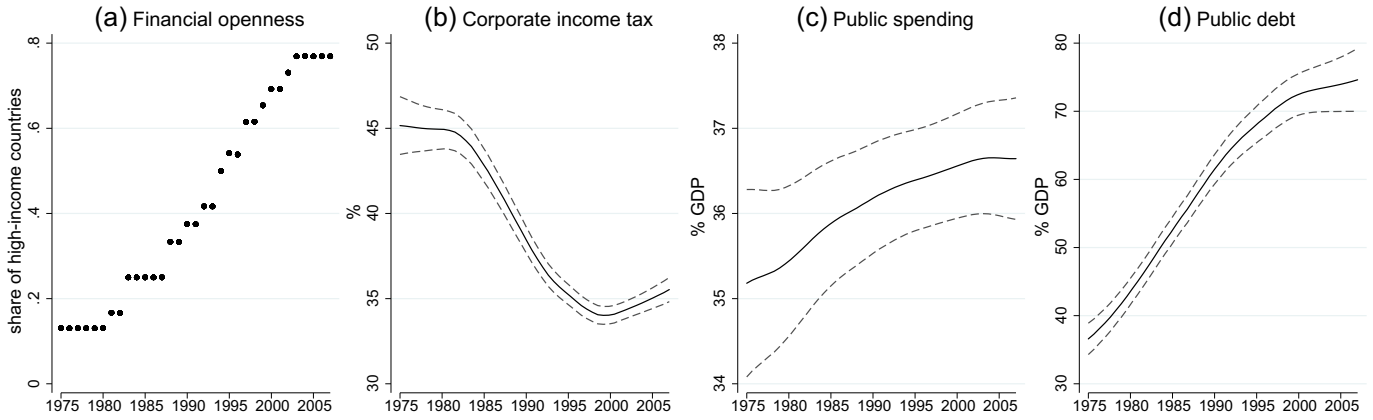

Fig. 1. Financial liberalization and public finance. Panel (a) displays the share of high income economies (IMF classification) reaching a maximum Chinn-Ito index of financial liberalization in any given year. See Chinn and Ito (2006) for details. Panel (b) shows the average statutory corporate tax rate in high income countries. The solid line represents the local mean smoothed series, weighted by real PPP GDP and dashed lines represent 95% confidence intervals. Similar statistics are shown in panel (c) for the government primary expenditure share in GDP, sourced from Mauro et al. (2013) and in panel (d) for the general government debt share in GDP, sourced from Abbas et al. (2010). See Appendix A for coverage and summary statistics.

country elect every period a government that sets productive public spending and its financing through debt, labor and capital taxes to maximize the voters' lifetime welfare.

Capital mobility generates two distinct externalities. First, seeking to attract mobile private capital, countries use public spending as an instrument of fiscal competition.[2] In this context, I study a novel channel whereby higher public spending not only raises the marginal productivity of private capital as in the previous literature, but leads to the production of new varieties and thus creates a positive industry level externality that increases with the number of competing countries. Second, deficit spending yields a negative pecuniary externality (an increase in the interest rate) as national governments ignore the crowding out effect in other countries. This leads to higher public debt everywhere. To focus on the role of deficit financed public spending, in the benchmark model I assume residence based capital taxation.[3] Both externalities arise from the common capital market inducing "beggar-thy-neighbor" behavior, hence they do not depend qualitatively on the government's finite time horizon.

Importantly, the net effect of these cross-border fiscal externalities, shaped by the domestic political conflict between young and old generations, becomes crucial for the prospects of international policy coordination.

In this framework I derive analytic policy rules describing strategic fiscal policies implemented by elected governments and contrast them, both in the short run (i.e. conditional on previous period capital stock and debt) and the steady state, against policies implemented under the assumption that short-termist governments can credibly coordinate to maximize the joint lifetime welfare of current generations. I then analyze how fiscal externalities and equilibrium policies depend on the scope of financial integration, proxied by the number of countries participating in the common capital market. Finally, I compare the output and welfare associated with strategic and coordinated policies and study under what conditions currently living generations are made better off by international policy coordination of their respective short-termist governments.

First, for a given number of financially integrated countries, fiscal competition in public spending leads in the short run to lower capital tax rates relative to coordinated policies. The mechanism is new to the fiscal competition literature. While capital taxation is residence based hence there is no direct incentive to lower tax rates to attract new capital, governments substitute current tax revenues with debt in order to fund public spending. In turn, this increases the tax base both by attracting more capital and making it more productive. Therefore, lower tax rates under fiscal competition do not translate necessarily into lower welfare in the short run, another major difference with respect to the standard tax competition framework. In contrast to the short run results, *steady state* capital tax rates are higher and public spending is lower under strategic policies since capital accumulation is hampered by excessive public debt.

Second, following an increase in the scope of financial integration, proxied by the number of integrated countries, fiscal competition becomes more intense and both public spending and debt go up. Capital and labor taxes decline if the weight of the young in the political process is large. This response of taxation to an increase in the scope of financial integration sheds new light on the interaction between cross border externalities and the domestic political conflict between generations. Young agents prefer low labor taxes, high capital taxes, high public spending that increases their productivity. The current old agents would like to minimize capital tax rates by spreading the cost of public spending into the future through public debt. In contrast, the current young foresee the negative effect of debt for their old age income and hence prefer lower levels. While similar inter-generational trade-offs were studied in the literature, here however public debt is determined, together with the interest rate, as an equilibrium outcome of multiple strategic policies in an integrated capital market. In particular, at low initial levels, public debt increases faster with the scope of financial integration. Thus, when the political weight of the young is large, an increase in the scope of financial integration reduces the need for current tax revenues and tax rates decline.

Finally, relative to coordinated policies, fiscal competition is optimal in the short run from the point of view of the current generations of voters only if the number of financially integrated economies is below some threshold.[4] In this case, the positive effect of public

[2] See Romp (2005) for an overview on the role of public capital on productivity and growth.

[3] In general, capital income may be taxed in the country where the income is earned (source based taxation), or in the country of residence of the person who receives it (residence based taxation). As shown in Supplementary Appendix IV, introducing source based taxation and thus direct tax competition does not alter the main results.

[4] Coordination can be viewed as an alternative set of fiscal institutions (e.g. budget rules) whose adoption depends on the cost-benefit analysis of the current voters. See Alesina and Passalacqua (2016) for a survey of the literature on the political economy of public debt.