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Political constraints to growth in an economic union ☆

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ABSTRACT

This paper studies the political economy of growth in an economic union such as the EU. In the spirit of Acemoglu, Aghion and Zilibotti [Acemoglu, D., Aghion, P. and Zilibotti, F., 2006a, Distance to frontier, selection and economic growth, Journal of the European Economic Association, 4:1, 37–74; Acemoglu, D., Aghion, P., and Zilibotti, F., 2006b, Growth, development and appropriate versus inappropriate institutions, mimeo MIT.], as the economy approaches the world technology frontier, structural reforms that increase competition in intermediate goods sectors are necessary to boost innovation and productivity growth. Reforms, however, raise the opposition of incumbents and, therefore, are politically difficult to implement. When there are important cross-border policy spillover effects, national governments are more easily captured by vested interests, as they fail to internalize the benefits of reforms on the rest of the union. In this situation, productivity growth may be sluggish and the economy can fail to converge to the frontier. On the other hand, when policy is chosen by a union government (or a collective body that takes into account union welfare), the internalization of spillovers raises the perceived benefit of reforms and, consequently, lowers the ability of lobbies to obtain high levels of protection.

1. Introduction

In recent years, constitutional and economic reforms have been at the center of the political and academic debate in the European Union. A long list of economic analyses have stressed the importance of structural reforms in product and labor markets to unleash the innovation and growth potential of the EU.[1] The academic debate, however, generally fails to acknowledge the relationship between constitutional (e.g. the allocation of competencies between the EU and national governments) and economic reforms; in short, the link between the political and economic future of the EU. This paper investigates the nature of political constraints to growth in an economic union under different constitutional (or political) regimes.

Let me review in a nutshell the argument for economic reforms in the EU (which also provides the main motivation for the growth model employed in the paper). This argument is clearly described in the report to the European Commission known as the Sapir Report (2004). Growth in the post-war era in Europe was based on a set of economic institutions (among which non-competitive arrangements as various forms of state intervention in the economic activity) that favored investments.[2] These institutions were suited at a time where the European economy was catching up with the technological leadership of the United States. However, once the technological gap narrowed, growth opportunities led by the adoption of existing technologies exhausted and Europe became more dependant on internally generated innovation. In the new economic environment, non-competitive arrangements that spurred investments in the post-war period are widely seen as imposing limits on innovation and growth. Hence, the need for reforms. As the Sapir Report puts it: "*Europe's unsatisfactory growth performance during the last decades is a symptom of its failure to transform into an innovation-based economy*" (page *ii*).

The model builds on the work of Acemoglu, Aghion and Zilibotti (2006a) (henceforth, AAZ) who introduce the idea of *appropriate* (economic) institutions in an endogenous growth framework. They provide a model where certain rigid arrangements that reduce competition (e.g. high regulation) have positive effects on growth when an economy is far from the world technology frontier and the main economic problem is to fund investment in existing technologies. However, as the economy approaches the frontier, the potential

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[1] See, for instance, OECD (2007).

[2] Eichengreen (2007) provides several examples on the role of non-competitive arrangements in boosting investment in Europe after World War II.

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for growth by simply adopting existing technologies shrinks and anti-competitive arrangements are no longer optimal. Economic efficiency would require a change in economic institutions to more competitive relationships that favor innovation through a better selection of entrepreneurs and firms. However, governments might fail to implement such a change. The reason is that anti-competitive policies that favor growth through investment in early stages enrich incumbents. When economic power determines political power, governments find it difficult to reverse policies that are opposed by economically powerful constituencies. This political opposition to reforms ultimately reduces economic growth, possibly to the point where the economy stops converging to the frontier.

In this paper, I extend this framework to consider an economic union under two alternative constitutional regimes. Under the first regime (which I will refer to as *political separation*), national governments decide policy independently. In the second regime (defined as *political integration*), a union government chooses policy for the entire union. Groups that stand to lose from reforms (i.e. the reduction of anti-competitive regulations) lobby national governments under political separation and the union government under integration.

The model shows that in an economic union approaching the world technology frontier (i.e. which would benefit from economic institutions that promote competition), anti-competitive regulation is higher under political separation than under political integration, if cross-border policy spillovers are large. The reason is that, due to the cross-border effect of the policy reform, national governments fully internalize the political cost of reducing regulation while only partially internalizing its benefit. This entails that incumbent firms find it easier to lobby for (and obtain) inefficiently high regulation when national governments act separately. This political economy distortion affects economic performance, implying that growth will be slower under political separation than under integration. Moreover, it is possible to have an equilibrium such that an economic union converges to the technology frontier under political integration, while it fails to converge under separation.

This article is at the cross-road of three recent lines of theoretical research. First, is the literature on the political economy of fiscal federalism. In particular, Brou and Ruta (2006), Bordignon et al. (2008), Redoano (2003) and Lockwood (2007) look at the allocation of competencies between different levels of government (local and central) when special interest politics is taken into account. Second, the literature on political (dis)integration and growth as Alesina, Spolaore and Wacziarg (2000), Alesina et al. (2005), Spolaore and Wacziarg (2005) and Brou and Ruta (2007). These papers focus on the channels through which political integration and separation affect economic growth. Finally, this paper contributes to the recent literature on fiscal federalism and growth (Oates, 1993; Brueckner, 2006; Hatfield, 2007; Koethenbuerger and Lockwood, 2007), which studies how centralization and decentralization of policy-making affect economic growth.

The rest of the paper is organized as follows. Section 2 describes the model, while Section 3 studies the political economy of reforms and growth in an economic union under political integration and separation. Concluding remarks follow.

2. A stylized model of growth in an economic union

Consider an economic union with a population of size 1 of overlapping generations of two-period lived agents and formed of m countries indexed by $i=1,2,\ldots,m$. These countries have equal size $(1/m)$ and similar economic and political structures. Namely, each country is populated by the same number of capitalists, who own firms, and workers, who supply their labor inelastically. Agents in the union have identical linear preferences in the consumption of the only final good produced. This simple framework allows us to focus on the production side of the economy.

2.1. Production

A unique final good, y, is produced at time t in all countries of the union. This final good is produced competitively using labor and intermediate inputs according to the following aggregate production function:

$$y_t = \frac{1}{\alpha} L_t^{1-\alpha} \sum_{i=1}^{m} A_{it}^{1-\alpha} x_{it}^{\alpha}, \tag{1}$$

where A_{it} is the productivity of intermediate input i at time t, L_t and x_{it} are respectively labor and the flow of input i used in final good production at time t and $\alpha \in (0,1)$. The final good is the numeraire in this economy (with a price normalized to 1) and is used in the production of intermediate goods.

Condition (1) assumes the Armington (1969) technology, where intermediate goods are differentiated by origin, so that input i is supplied by country i. This technology can be rationalized with the presence of country-specific knowledge (human capital) in the production of input i. Each intermediate good is produced by a national monopolist that has access to the most productive technology A_{it} and then is sold to final good producers in the market independently of their location. Shares of national monopolists are indivisible and non tradable and are owned by a small fraction of individuals in each country. More importantly, since these countries have formed an economic union, there are no costs associated to trade. This will provide the channel through which the effects of policy in one country (to be introduced below) spill over onto other countries in the union.[3]

The intermediate good producer has access to a linear technology and transforms one unit of final good into one unit of intermediate good. The national monopolist faces a competitive fringe of imitators (possibly from other countries of the economic union) that can copy its technology and produce an identical intermediate good. Imitation of the production process of intermediate i in another country of the union is successful with probability $\chi_i \in (0,1)$. Several reasons may rationalize a positive probability of failure in foreign imitation. Namely, this may be due to the adjustment process required to employ country i-specific knowledge in a different country of the union. Importantly, this probability of failure in foreign imitation renders intermediate good markets in the economic union less than perfectly integrated.

Competition in national intermediate good sectors is influenced by government regulation that limits entry of both foreign and national potential competitors. Because of this regulation, the competitive fringe faces higher costs of production and needs additional units of the final good at time t to produce one unit of the intermediate good i. Namely, the higher the level of government regulation in country i and in the rest of the union, and the less competitive will be the market for the intermediate good i. The existence of this fringe, however, forces the national monopolist to charge the limit price

$$p_{it} = (1-\chi_i)\xi_{it} + \chi_i \xi_{\min t}, \tag{2}$$

where ξ_{it} and $\xi_{\min t}$ are respectively the amount of regulation in country i and the minimum level of anti-competitive regulation in the union at time t.[4]

[3] One could argue that intermediate goods are mostly used as inputs by national firms. While this argument is certainly true, the idea captured by this production function is simply that aggregate productivity in an economic union is influenced by the productivity of the different intermediate sectors in member countries.

[4] This limit price is an equilibrium under the assumption that $(1-\chi_i)\xi_{it} + \chi_i \xi_{\min t}$ is not so high that the national monopolist prefers to set a lower price. This is insured by the assumption that $(1-\chi_i)\xi_{it} + \chi_i \xi_{\min t} \leq \frac{1}{\alpha}$.