

Why Lisbon Fails

Michele Ruta*

Abstract

This article looks at the political economy of structural reforms and growth in the European Union. As the EU's economy approaches the world technology frontier, structural reforms that increase competition in intermediate goods sectors are necessary to boost innovation and productivity growth—the main objective of the Lisbon Agenda. Such reforms, however, raise the opposition of incumbents and, therefore, are politically difficult to implement. When there are important 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. This suggests that the weak political governance of the Lisbon Agenda, which is centred on the peer pressure of national governments, and the ensuing inability to complete the single market in non-manufacturing sectors, explains the Lisbon failure. (JEL classification: D72, F42, O30, O40).

Keywords: European Union, structural reforms, lobbying, growth.

We all know what to do, we just don't know how to get re-elected after we have done it.¹

Jean-Claude Juncker, President Eurogroup

The Eurogroup is giving increasing attention to structural reforms [...]. However, the approach of the Eurogroup is limited to comparing the experiences of different countries, encouraging the laggards to learn from the more active reformers. [...] I believe that what is missing is the Union. If reforms are not implemented, the reason is often that national governments agree so. We have seen it with energy, we have seen it with finance, we have seen it with services. [...] I know how difficult and rare it is to abandon this comparative approach to work as a real Union. I think, however, that it is of vital importance for our economies to realize that the destiny of most structural reforms is in Brussels, not in national capitals.²

Tommaso Padoa-Schioppa, Economy Minister of Italy

1 Introduction

It is standard to compare the European economy (or subsets of it) to the United States. According to the Organization for Economic Cooperation

* Economics Department, European University Institute, Florence, Italy.
e-mail: michele.ruta@eui.eu

¹ Quoted in *The Economist*, 15 March 2007.

² Press conference following the Eurogroup meeting, Brussels, 27 February 2007.

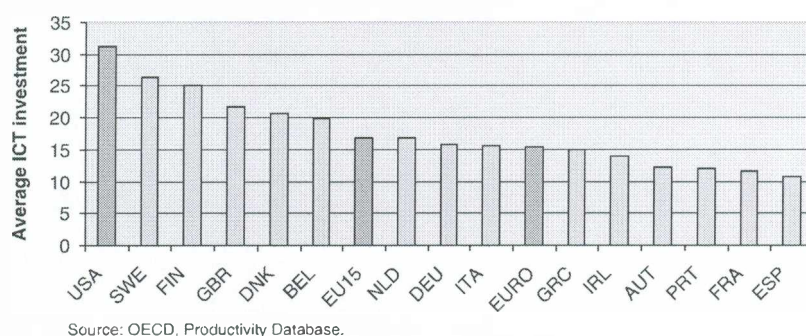


Figure 1 ICT investment as share of total investment, 1995–2003.

and Development (OECD, 2007), GDP per head in the Euro area is almost 30 percent lower than in America and the average annual growth of GDP per person in the EU15 in the last 10 years has been 0.4 percentage points below that of the United States. This gap implies that in the last decade income per head in the European Union has begun to decline in comparison to that of the United States. As noted by Blanchard (2004), the transatlantic gap can be exaggerated: faster per capita GDP growth in America partly reflects longer hours of work compared to Europe and differences in measurement. However, productivity growth slowed in Europe in the late 1990s, whereas in America it speeded up, and the wide perception is that the European Union has stopped catching up with the United States. One reason for the failure of most European countries—in particular, continental ones—to narrow the productivity gap is that the increase in capital intensity (i.e. capital services per hour worked) has been faster in the United States due to stronger investment in information and communication technologies (ICT) (Figure 1).

Europe's response to its economic difficulties came in Lisbon in March 2000. The Lisbon European Council famously set out the goal for the European Union “*to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*”. This goal was to be achieved through a series of policies to incentive R&D, structural reforms for competitiveness and innovation, completing the internal market and modernizing welfare systems. However, the “Lisbon Agenda”, as this objective and the system of policies and reforms have since been referred to, is largely viewed as a failure.³

³ There are substantial differences in the ability of countries to introduce timely reforms. An interesting research agenda, which I shall not pursue here, investigates the determinants of such differences. For an overview of this literature, see Hoy et al. (2006).

The report of the High Level Group on the Lisbon strategy chaired by Wim Kok (Kok, 2004) concluded that the disappointing delivery of the strategy was primarily due to a lack of determined political action. The Commission's midterm review of the Lisbon strategy (European Commission, 2005) pointed out that slow pace of policy reforms hold back economic growth in Europe and proposed a new process. The renewed Lisbon strategy (or Lisbon 2) recommends a stronger focus on growth and employment: simplification and national ownership are the key elements to re-launch the Lisbon reforms agenda. In particular, the Commission proposed that member states present national reform programmes, after broad discussion at the national level. While improving along several dimensions, Lisbon 2—as its predecessor—assigns to the peer pressure of national governments and to the influence of the European Commission the difficult task of implementing those reforms necessary to transform Europe into an innovation-based economy. Pisani-Ferry and Sapir (2006) point out that, after 1 year, the outcome of Lisbon 2 is mixed at best.⁴

Why does Lisbon fail? In a nutshell, I argue that the reason is the presence of political constraints to growth and the lack of appropriate political institutions. In an economic union, when structural reforms in each country create losers within countries and positive cross-border spillovers, national governments are easily captured by vested interests that stand to lose from reforms. The reason is that, while fully internalizing the political cost of a reform, national governments only internalize its effect on the welfare of their citizens and not on the rest of the union (hence, the above quote from Jean-Claude Juncker). This would not be the case if structural reforms were decided by a union government (or a collective body such as the Eurogroup) maximizing *union*—as opposed to *national*—welfare.

This simple observation has quite important implications for the political economy of structural reforms in an economic union. The internalization of the positive spillover raises the benefit of reforms and makes it more difficult for vested interests to obtain preferential treatments. As in the above quote of Tommaso Padoa-Schioppa, the future of structural reforms is in Brussels (i.e. deciding at the EU level), not in national capitals. This is particularly true in heavily regulated sectors, such as energy, transport, communication (telecom and posts), financial and professional services where the benefits of stronger competition would be mostly perceived at the EU level, but the costs are clearly sustained by incumbents sheltered by national regulation. This article argues that

⁴ This is not to say that the relaunch of the Lisbon strategy in 2005 had no positive effect whatsoever. For an assessment of the achievements of Lisbon 2, see the progress report by the European Commission (2007).

failing to realize this political economy mechanism has negative consequences for economic growth in the European Union.⁵

The article is organized as follows. The next section discusses the importance of this approach for the current situation in Europe. Section 3 studies the political economy of reforms and growth in an economic union. Concluding remarks follow.

2 Growth and innovation in Europe: a long-run view

This section briefly discusses some growth facts for Europe that provide the main motivation for the argument developed in the next section.

If we were to look at the growth performance of (western) Europe and the United States in the period that goes from the end of World War II (WWII) to today, the picture would look quite different from the one described in section 1. The annual growth rate of output per worker between 1950 and 2000 has been of 1.9 percent in the United States, much lower than continental European countries, such as Germany, France and Italy, which respectively achieved rates of 2.9, 2.8 and 3.5 percentage points. The reason behind these apparently contradictory numbers is that the post-WWII period, and in particular the quarter of century between 1948 and 1973, has been a period of extraordinary growth in western Europe, often referred to as the golden age of economic growth. Breaking up the period into the two quarters, one finds out that the growth rate of western Europe was equal to 4.5 percent until 1973 and to 2.1 percent in the second subperiod.

The rapid growth of the post-war period in Europe reflected the process of catching up with the United States, the world technology leader at the time. European countries could sustain this extraordinary economic expansion by adopting technological and organizational knowledge that was developed in the United States in the inter-war period and had not yet reached the other side of the Atlantic. Successful convergence was based on a set of economic institutions that had the ultimate goal of boosting investment (hence the name, *investment-based* growth strategy). Among these institutions, non-competitive arrangements as state intervention in

⁵ The other pillar of the Lisbon Agenda is the reform of labour markets and pension systems. Here cross-border policy spillovers are likely to be important, however there are large differences across countries in preferences over welfare systems. This element of heterogeneity makes the argument of the present work less appealing for welfare reforms, as in the classic work of Oates (1972) and in the more recent political economy analysis (as Alesina et al. 2005). Writing about the tasks of a European Federation, Luigi Einaudi (1943, 1944) essentially made this point already in his studies in the 1940s.

the economic activity and long-standing relationships between banks and clients played an important role.⁶

This picture radically changed in the last quarter of the twentieth century. As the European economy was getting closer to the frontier and opportunities of imitating existing technologies were exhausted, growth in Europe was increasingly dependent on internally generated innovation (hence the name *innovation-based* growth strategy). However, economic institutions that were appropriate for imitation are not necessarily conducive to innovation. Non-competitive arrangements that successfully spurred investments in the post-war period increasingly imposed limits on economic growth in the following quarter. The logic of the Lisbon Agenda, as well discussed in the report to the European Commission known as the Sapir Report (2004), is essentially to endow Europe with a set of economic institutions that would facilitate the switch from an investment to an innovation-based growth strategy.

Obviously one cannot discuss economic developments in Europe without making reference to the process of economic integration that started in 1957 and had a strong boost with the Single Market Program and Monetary Union in the 1990s. In particular, the effects of these initiatives on the increase in intensity of product market competition in the manufacturing sector has been especially beneficial to productivity growth, as documented by the OECD (2002). However, economic integration in the European Union is *de facto* limited in several key non-manufacturing sectors, such as network industries, finance and professional services. In what follows, I will briefly argue that the lack of economic integration in these sectors—mostly due to heavy national regulations—is holding back Europe from fully reaping the benefits of an innovation-based growth strategy.⁷

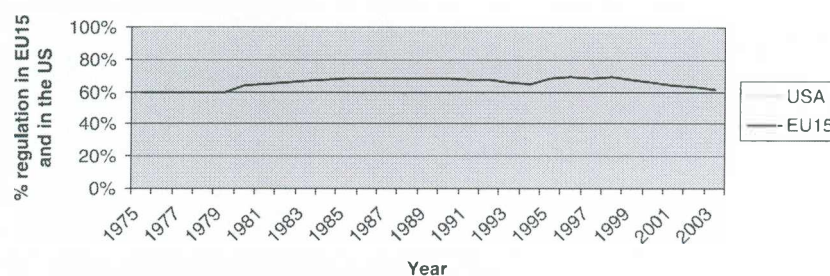
As discussed by the OECD (2007), even if product market regulation has substantially decreased in the past decades, some important differences persist across sectors. In particular, in several non-manufacturing sectors in continental Europe the regulatory stance remains restrictive. This is true for gas, postal services, rail transport, professional services, finance, electricity and telecommunications.⁸ Figure 2 compares regulation in these sectors in the EU15 and in the United States between 1975 and 2003, showing that anti-competitive regulation has been consistently

⁶ This is essentially the theory of economic growth of Gerschenkron (1962). Eichengreen (2007) provides an extensive discussion and several examples that highlight this point.

⁷ On this, see also the detailed report by Faini et al. (2006).

⁸ Clearly not all regulation is anti-competitive (or, more in general, unnecessary). However, the stringency of regulation varies significantly across OECD countries, suggesting that in several countries regulation is more restrictive than what it would be optimal.

M. Ruta



Source: OECD, Product Market Regulation database.

Figure 2 Developments in the regulation of network industries EU15 versus US, 1975–2003.

lower in the latter.⁹ Quite importantly, as these sectors produce intermediate inputs used in final goods production, competition restraining regulation has severe “knock-on” effects throughout the economy. As it will be argued in the following section, limited competition among suppliers increases the cost of inputs and reduces productivity of intermediate goods when an economy is close to the technological frontier.

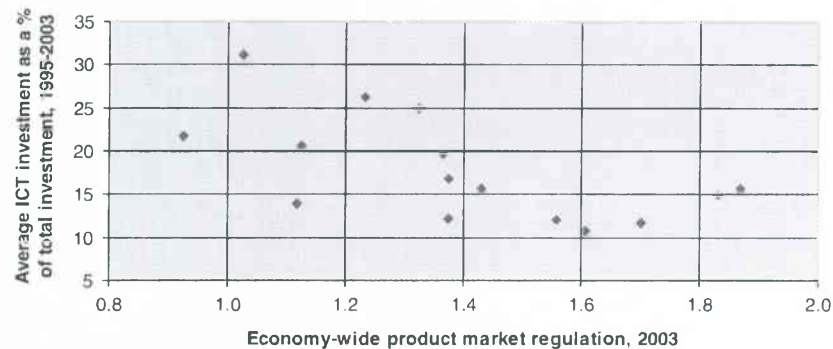
Anti-competitive regulation in the non-manufacturing sectors substantially weakened incentives of incumbents to innovate, this in turn has compressed growth in the EU.¹⁰ The first effect can be seen by looking at the correlation between ICT investment and regulation. Figure 3 plots the data on ICT investment in the period 1995–2003 of Figure 1 against an index of economy-wide product market regulation for the same sample of countries. The negative correlation provides a clear idea of the effect of anti-competitive regulation on ICT investment. Finally, the effect of anti-competitive regulation on growth is shown in Figure 4 (reproduced from Conway et al., 2005), where productivity growth over the period is calculated assuming that EU countries had aligned their regulations in each intermediate sector to the least constraining stance in the OECD area in that industry. The data for the United States are included in the figure for comparison.

Figure 4 shows that annual productivity growth in the business sector in the EU15 between 1995 and 2003 could have been 0.87 percentage

⁹ In the figure, the EU15 has a share of 60 percent or higher of total (i.e. EU15 plus US) regulation in network industries and the US of 40 percent or lower.

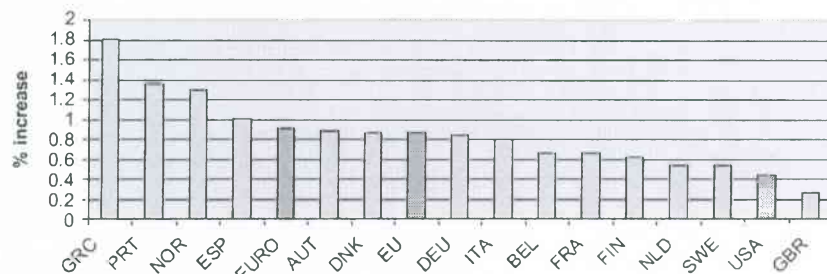
¹⁰ The positive effect of innovation on growth is well established in the literature. The link between competition and innovation is more controversial. The empirical literature tends to be in favour of a positive effect of competition on innovation [see Nickell (1996) for a pathbreaking work]. Acemoglu et al. (2006a) provide evidence that competition is more important when an economy (or a sector) is close to the world technology frontier.

Why Lisbon Fails



Source: OECD, Product Market Regulation database and productivity database

Figure 3 ICT investment and product market regulation in a sample of OECD countries.



Source: Conway et al. (2006)

Data are the average increase in annual business-sector productivity given an easing in the stance of regulation to the least restrictive of competition in the non-manufacturing sectors in OECD countries in 1995

Figure 4 Potential increase of annual business sector productivity growth over the period 1991–2003.

points higher, if regulation in non-manufacturing sectors were lower.¹¹ This number is even higher for the Euro area (0.92 percent, also in the picture), where regulations are more important. Even if purely indicative, one can read these numbers as capturing the cost of non-Lisbon—i.e. the cost of the inability to implement structural reforms.

¹¹ Differences across European countries—from the small increase in the United Kingdom (0.2 percentage points) to the high productivity gain of Greece (1.8 percent)—are due to differences in the regulatory environment, which is the most restrictive in Greece and the least in the United Kingdom according to indicators built by the OECD.

In the rest of the article, I present a stylized model of structural reforms and growth in an economic union, which is based on the work of Acemoglu et al. (2006a,b) (henceforth, AAZ) and Ruta (2007).

3 The political economy of structural reforms and growth in an economic union

Consider an economic union with a population of size 1 formed of m countries indexed by $i = 1, 2, \dots, m$. These countries have equal size and similar economic and political structures. We first describe the economic environment.

3.1 The description of the economy

In the economy, a unique final good is produced at time t in all countries of the union. This final good is produced competitively using intermediate inputs from each of the member countries. Each intermediate good is produced by a national monopolist that has access to the most productive technology and then is sold to final good producers in the market independent of their location. Since these countries have formed an economic union, there are no costs associated to trade.

Each 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. However, competition in national intermediate good sectors is influenced by government regulation that limits entry of potential competitors.

A less competitive national market implies higher profits for the national champion (as, sometimes, national monopolists are referred to). On the other hand, anti-competitive regulation in country i will reduce aggregate final output in the national as well as in the union economy because of standard monopoly distortions. Notice, however, that if country i increases anti-competitive regulation in its intermediate sector, it reduces its final output only for a fraction equal to $1/m$, but fully internalizes the benefits through an increase in the profits of its national champion. This effectively creates a policy externality within the economic union which has important implications for the political equilibrium discussed in the next subsection.

3.2 The determinants of economic growth

Economic growth in this economy is driven by progress in the aggregate technology (A_t), which is the sum of the productivity in

intermediate sectors. I follow AAZ and assume that each national monopolist can increase its productivity by two complementary processes: (i) innovation—i.e. the discovery of new technologies and (ii) imitation—i.e. the adoption of existing technologies from the world technological frontier (which we denote with $\bar{A}_t$ and assume growing at the exogenous constant rate g).

Firms in the intermediate sectors are owned by capitalists and run by entrepreneurs. Firms' productivity is determined by entrepreneurial skills. There are two types of entrepreneurs: high-skill and low-skill. Entrepreneurial skills are initially unknown and are revealed after an agent works as an entrepreneur for the first time. Last, investment projects of firms can be financed either through the retained earnings of old entrepreneurs or by the capitalist who owns the firm.

The key economic decision in the AAZ model is whether to retain an entrepreneur with low skills and to replace him with a new entrepreneur with (on average) higher skills. The benefit of replacing a low-skill entrepreneur is traded off with the cost of financing investment projects, whereby the earnings of the retained low-skill entrepreneur can be used to finance the investment project. Higher retained earnings will mitigate underinvestment problems that can emerge from market imperfections and moral hazard, but at the expense of making low-skilled entrepreneurs more attractive to firms. The decision to retain an entrepreneur at time t is denoted by $R_t \in \{0, 1\}$, where $R_t = 1$ and $R_t = 0$ correspond to retention and termination, respectively.

We define $a_t \equiv A_t/\bar{A}_t$ (where $a_t \in [0, 1]$) as the inverse measure of the economic union's distance to the world technology frontier at time t . The dynamic behavior of the economy (i.e. the convergence process to the technology frontier) is described by the following condition:

$$a_t = \begin{cases} \frac{1}{1+g} (\bar{\eta} + \underline{\gamma} a_{t-1}) & \text{if } R_t = 1 \\ \frac{1}{1+g} (\underline{\eta} + \bar{\gamma} a_{t-1}) & \text{if } R_t = 0, \end{cases} \quad (1)$$

where both η and γ are positive parameters with $\bar{\eta} > \underline{\eta}$ and $\bar{\gamma} > \underline{\gamma}$.

The economic intuition underlying condition (1) is the following. If the economy is distant from the frontier (a_{t-1} low), productivity growth is mostly driven by adoption of existing technologies and, therefore, growth is higher under retention ($R_t = 1$). In an analogy to the discussion in Section 2, we refer to this as an investment-based strategy, because the main benefit of retaining (low-skill) entrepreneurs is their ability to reinvest retained earnings, thus effectively increasing the investment rate of the economy. On the other hand, as the economy gets closer to the world technology frontier (a_{t-1} higher), growth increasingly depends on

innovation and on the skills of the entrepreneurs, thus growth is higher under termination ($R_t = 0$). We refer to this as an innovation-based strategy, since the benefit in terms of growth of removing low-skill entrepreneurs is due to the process of “creative destruction”.

Equation (1) is depicted in Figure 5. Economic growth is higher under the investment-based strategy for $a_{t-1} < \hat{a}$ (i.e. the economy is sufficiently far from the technology frontier), where the schedule ($R = 1$) implies a higher a_{t-1} for a given a_t . On the other hand, productivity growth is larger under an innovation-based strategy ($R = 0$) for $a_{t-1} > \hat{a}$ (i.e. the economy is sufficiently close to the frontier), where $\hat{a}$ is determined by the intersection of the two schedules ($R = 0$) and ($R = 1$) in Figure 5 and is given by $\hat{a} = \bar{\eta} - \eta/\bar{\gamma} - \underline{\gamma}$.

Therefore, an optimal growth sequence is one in which the economy starts with an investment-based strategy and later switches to innovation (this sequence is depicted with the bold segments in Figure 6). When the economy is far from the technology frontier, investment in existing technologies is the engine of economic growth. As investment is increased by old entrepreneurs’ retained earnings, the investment-based strategy maximizes the growth rate of the economy. As adaptation opportunities shrink, the invention of new products and production processes becomes crucial for growth. The selection of high-skill entrepreneurs is essential for innovation and switching from the investment-based to the innovation-based strategy that allows the economy to achieve higher growth.

Naturally, nothing guarantees that the optimal strategy is an equilibrium. AAZ show that the economy will switch from the investment to the

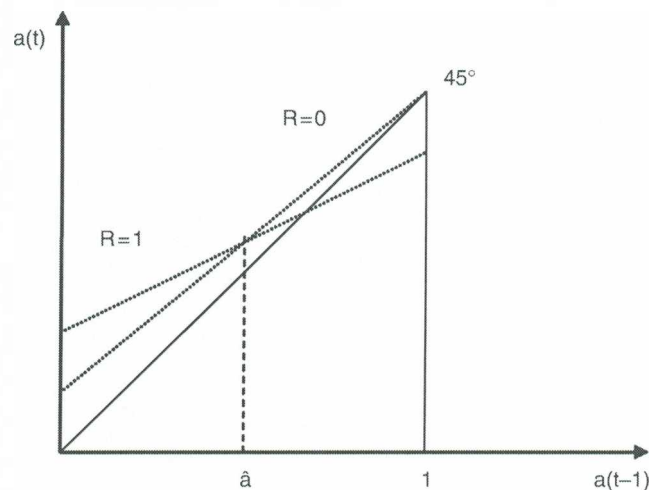


Figure 5 Investment-based and innovation-based growth strategies.

innovation-based strategy at $a_{t-1} = \tilde{a}$, where $\tilde{a}$ can be larger or smaller than $\hat{a}$ depending on institutional factors (e.g. organization of credit markets), underlying economic conditions (e.g. incentives of entrepreneurs) and government intervention the level of regulation). Below $\tilde{a}$, low-skill entrepreneurs are retained ($R_t = 1$), while above this threshold they are terminated ($R_t = 0$). In particular, there are two interesting equilibria. In the first one, defined as underinvestment equilibrium, $\tilde{a} < \hat{a}$: here for any $a \in (\tilde{a}, \hat{a})$ the economy switches to the innovation-based strategy ($R_t = 0$), while it would reach a higher growth rate under the investment-based strategy ($R_t = 1$). The second equilibrium, referred to as sclerotic, is the one for which $\tilde{a} > \hat{a}$: here for any $a \in (\hat{a}, \tilde{a})$, low-skilled entrepreneurs are retained ($R_t = 1$) even if a higher growth rate could be achieved through higher selection of entrepreneurs ($R_t = 0$). These equilibria are depicted in Figure 7 and 8, respectively (where the bold lines depict the equilibrium sequence).

AAZ show that reducing competition in intermediate sectors will increase $\tilde{a}$. When intermediate goods market are less competitive, profits are higher and so are the retained earnings of entrepreneurs. This induces capitalists to retain old entrepreneurs whatever their skills (i.e. encouraging $R_t = 1$). This fact has important implications for the role of government activity in the economy. For $\tilde{a} < \hat{a}$, government intervention aimed at reducing competition will increase growth. This is essentially a second best argument: if the economy is characterized by underinvestment, lower competition increases retained earnings that are used to finance part of the investment costs. This static inefficiency, the rent to the insiders, creates

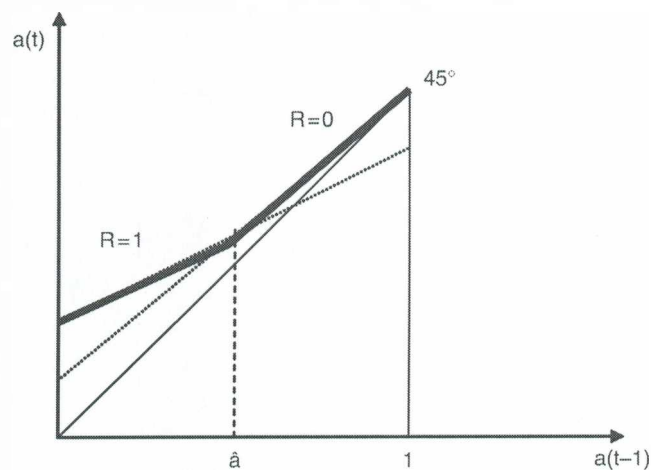


Figure 6 Optimal growth sequence.

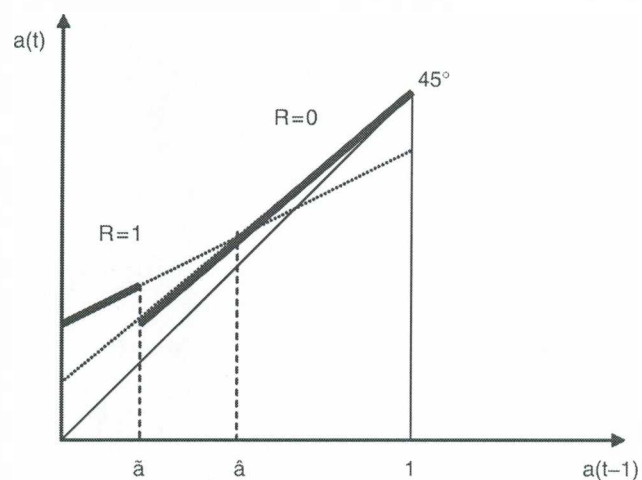


Figure 7 Under-investment equilibrium growth sequence.

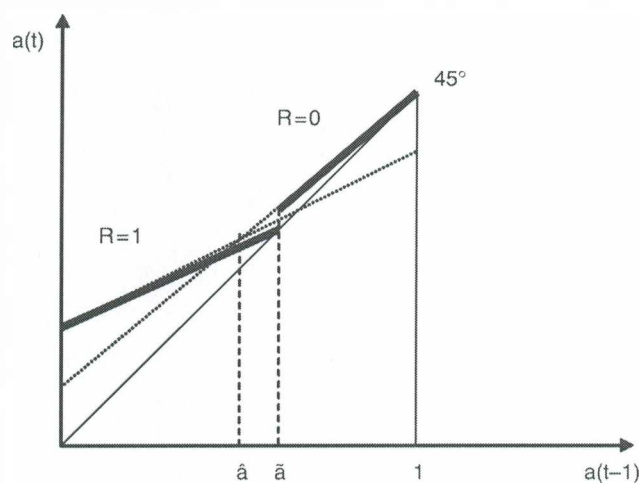


Figure 8 Sclerotic equilibrium growth sequence.

a bias in favour of the investment-based strategy that is beneficial to growth at earlier stages of development (i.e. far from the technology frontier). However, for $\tilde{a} > \hat{a}$ limiting competition has the opposite effect on growth. Moreover, government intervention can induce the economy to fall into a *growth trap*, defined as a distance to frontier a_{trap} where the economy never shifts to the innovation-based strategy and fails to converge (Figure 9).

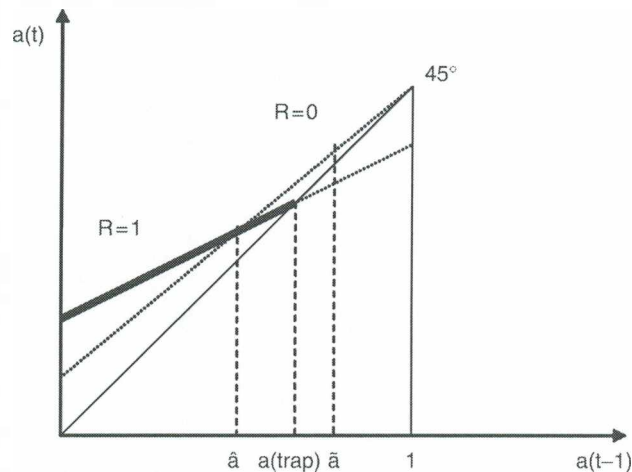


Figure 9 Growth trap.

Up to this point, we have considered regulation as exogenous. However, policies are endogenously determined through some political process. In particular, if economic power is related to political power through lobbying activities, capitalists (who benefit from anti-competitive policy) can influence the government's regulatory choice. In the next subsections, I discuss endogenous policy determination in an economic union and its effects on economic growth under two distinct constitutional regimes.

3.3 The politics of regulation under political integration and separation

Following Ruta (2007), we consider two extreme situations: political separation and political integration. In the first scenario, national governments independently and non-cooperatively choose national regulations. In the second scenario, a union government is in charge of deciding the policy for the economic union. We proceed by comparing these two political economy equilibria.

Under both regimes, governments are "*politically motivated*" as in the standard lobbying model of Bernheim and Whinston (1986) and Grossman and Helpman (1994). This implies that politicians care about the general electorate (i.e. the median voter), but can be influenced by lobbying activities of politically organized groups. Formally, this entails that the objective function of the government is a weighted average of aggregate welfare (here given by national and union output at time t ,

respectively, as a measure of national and union aggregate welfare) and political contributions that politicians can use for their electoral campaign or as private rents. The weight on this second term is often referred to as the *political bias*.

Capitalists are politically organized and can use their profits to lobby the government.¹² The political game has two stages. At the first stage, each lobby representing the interests of a monopolist offers to its national government (under political separation) or to the union government (under integration) a political contribution. This contribution is a binding commitment of payment and is contingent on the level of national regulation chosen by the government at each point in time. At the second stage, the government observes the contribution schedule and chooses the national level of regulation to maximize its objective function. Under political separation, this choice is independent of the actions of the other governments of the union; while under integration, the union government decides the regulatory stance for each member country. This static lobbying game between the capitalists and the government determines the equilibrium level of regulation for each period and has important implications for the dynamics of the economy.

As shown in Ruta (2007), in the political equilibrium governments choose regulation to trade-off the benefits for incumbents of a higher anti-competitive policy with the costs on the general welfare. More precisely, the positive marginal effect that national regulation has on the profit of the incumbent firm has to be equal to the cost of reduced output, weighted for the political bias of the government. Under political separation, the extent of restrictions to competition in national markets for intermediate goods depends on the importance of the externality. The larger the number of countries, the less each one of them internalizes the negative effect of national regulation on the union welfare and the higher is the extent of anti-competitive restrictions in each member country. On the other hand, in the political equilibrium under integration, the benefit to sector i of more restrictive regulation is equal to the marginal loss of union—and not only national—aggregate output. The externality plays no role in the determination of the equilibrium regulation under political integration, as the union government fully internalizes the policy spillover effect. This implies that the union government chooses a lower level of regulation.

To grasp the intuition, it might be useful to think of this result from the perspective of the rent seeking national monopolists. The non-cooperative

¹² The rest of the population has a clear interest in lobbying politicians as well, but it faces the standard collective action problem (as in Olson, 1965).

The last step of this analysis consists in studying the effects that static political economy distortions have on the dynamics of the economy. Recall that the threshold level of α in equilibrium ($\bar{\alpha}$) is an increasing function of the level of regulation. This implies that a decentralized economic union will switch to an innovation-based strategy later than a centralized one ($\bar{\alpha}^d > \bar{\alpha}^c$). There are two interesting configurations that describe the dynamic adjustment of this economy:

- $\hat{a} < \hat{a}^u < \hat{a}^l < a_{\text{trap}}$. The economic union will eventually converge to the technology frontier independently of its political regime. This growth sequence is depicted in Figure 10 (where the bold lines, as in the

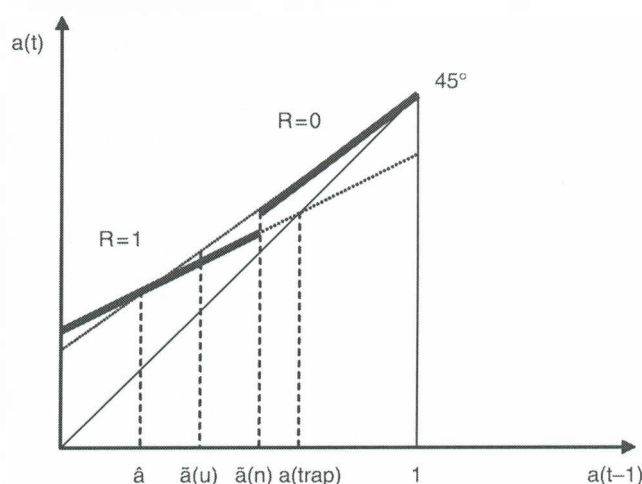


Figure 10 Growth sequence under political integration and separation (case I).

following figure, depict the equilibrium sequence under political separation—i.e. the Lisbon-type political institutions). The economy starts with a set of economic institutions ($R = 1$) that favour the investment-based strategy, which is optimal for $a < \hat{a}$, it would be optimal to adopt short-run contracts that favour innovation through enhanced entrepreneurial selection i.e. to switch to ($R = 0$). However, lobbying by national monopolists induces governments to choose high levels of anti-competitive regulation, thus increasing the (short-run) convenience to retain old entrepreneurs (and maintain the investment-based strategy for $a > \hat{a}$). Importantly, the economy fails to achieve the maximum growth rate for a range of values of a that depends on the political structure of the economic union. More precisely, political integration entails a lower level of anti-competitive regulation, which implies that the economy will switch to the innovation-based strategy closer to the growth maximizing strategy compared to political separation. For values of $a \in [\tilde{a}^n, \tilde{a}^i]$, growth is higher under political integration than under separation. In the long run, however, the economy switches to the innovation-based strategy independently of its political regime.

- $\hat{a} < \tilde{a}^i < a_{\text{trap}} < \tilde{a}^n$. Political integration in the economic union leads to convergence to the technology frontier, while political separation does not (Figure 11). More precisely, for $a < \hat{a}$ there is growth with anti-competitive policies under both political regimes. For, $a < \hat{a}$ growth is higher if the economic union switches from an investment-based to an innovation-based growth strategy, but lobbying by national monopolists keeps regulation high and initially prevents the strategy switch.

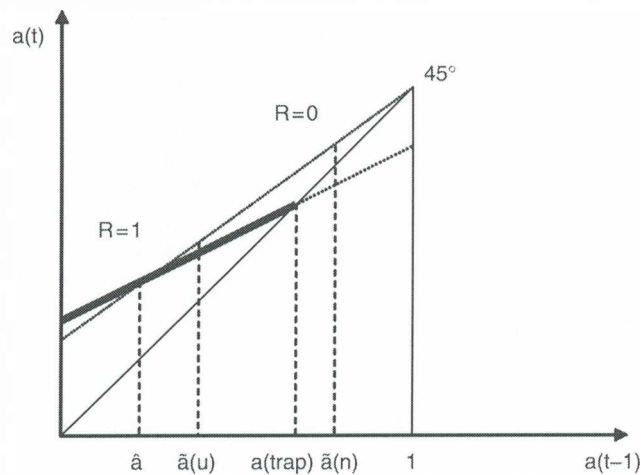


Figure 11 Growth sequence under political integration and separation (case II).

Differently from the previous configuration, the political regime here determines whether the economy will be stuck in a non-convergence trap or will ultimately converge. In particular, under political integration regulation is lower and the economic union converges to the frontier; this will not be the case under political separation, where national monopolists can always induce governments to adopt higher anti-competitive policies. As in the previous case, the lack of coordination of national governments under political separation (and their failure to realize the negative effects of their policy on other member countries) is the reason why lobbying is more effective. However, in this case protection of incumbent firms not only retards growth for a temporary interval of time, but also pushes the economic union in a non-convergence trap. This equilibrium describes the most dangerous scenario for an economic union which is unable to coordinate structural reforms.

4 Conclusions

In the last few years, the European Union has engaged in a debate on the reform of its constitutional framework. While emphasizing the common economic problems of European countries (and in particular of the Euro area members), several economists—as Alesina and Giavazzi (2006)—fail to realize the link between improvements in the institutional architecture of the European Union and the need for structural reforms. Others, as Wolf (2007), lament the enormous amount of energies that is lost to debate the reshaping of EU political institutions and are not dedicated to debate Europe's economic problems. They argue that a constitution for Europe should not be a priority at all. To the contrary, this article argues that the economic and political future of the European Union are linked.

The argument that is presented here is the following. An economy that approaches the technology frontier might fail to switch to a (growth-enhancing) innovation-based strategy because some vested interests induce governments to choose inefficiently high level of anti-competitive regulations in product markets. This problem is more severe—and growth is lower—in an economic union where national governments choose policy independently than in an economic and political union, where policy is chosen by a union government (or a collective body maximizing the welfare of the entire union). The reason is that, in the latter case, policymakers fully internalize the spillover effect of reforms (a reduction of regulation) and, as a result, this makes lobbying less effective for vested interests. This political economy mechanism is particularly relevant for intermediate-good sectors, such as energy, finance and services,

where the level of anti-competitive regulation in the EU (and especially in the Euro area) is high.

This discussion also highlights the difficulties of the current politico-economic situation in Europe. It is widely agreed that the support for the process of European integration in the 1960s was largely due to the exceptional economic performance of Europe at the time. If economic success is required for further progress in political integration in Europe and—as discussed in this article—economic growth in the European Union depends on further political integration, two equilibria are possible. The first is the present trap, with national economic policymaking, nationally segmented intermediate sectors and low growth; the second equilibrium is characterized by political integration, a completed single market with lower anti-competitive regulation and higher economic growth. National special interests prosper in the closed environment created by national economic policies. Restarting the political and institutional integration process in Europe is the way to limit the influence of vested interests and put EU economies back on a reform and higher growth track.

Acknowledgments

This article was written while I was a Marie Curie fellow at the Economics Department of the European University Institute in Florence, Italy. I would like to thank the MacMillan Center at Yale University for hospitality during part of this project and Daron Acemoglu and Daniel Brou for useful discussions. I also benefited from the comments of an anonymous referee and of seminar participants at the 2007 Venice Summer Institute on Reinventing Europe. I am particularly grateful to Massimo Bordignon, Thiess Buettner and Rick van der Ploeg for suggestions and for organizing this conference. Errors are only my responsibility.

Funding

Centro Studi sul Federalismo at Fondazione Collegio Carlo Alberto, Turin, Italy.

References

- Aghion, P., D. Acemoglu and F. Zilibotti (2006a), “Distance to Frontier, Selection and Economic Growth”, *Journal of the European Economic Association* 4, 37–74.

- Aghion, P., D. Acemoglu and F. Zilibotti (2006b), "Growth, Development and Appropriate Versus Inappropriate Institutions", Working paper, Economics Department, MIT, Boston, MA.
- Alesina, A., I. Angeloni and E. Etro (2005), "International Unions", *American Economic Review* **95**, 602–15.
- Alesina, A. and F. Giavazzi (2006), *The Future of Europe*, MIT Press, Cambridge, MA.
- Bernheim, D. B. and M. D. Whinston (1986), "Menu Auctions, Resource Allocation, and Economic Influence", *Quarterly Journal of Economics* **101**, 1–31.
- Blanchard, O. (2004), "The Economic Future of Europe", *Journal of Economic Perspectives* **18**, 3–26.
- Conway, P., D. De Rosa, G. Nicoletti and F. Steiner (2006), "Regulation, Competition and Productivity Convergence", Working papers, No. 509, Economics Department, OECD, Paris, France.
- Eichengreen, B. (2007), *The European Economy Since 1945*, Princeton University Press, Princeton, NJ.
- Einaudi, L. (1943), *Per una Federazione Economica Europea*, reprinted in *La Guerra e l'Unità Europea*, 1986, il Mulino, Bologna.
- Einaudi, L. (1944), *I Problemi Economici della Federazione Europea*, reprinted in *La Guerra e l'Unità Europea*, 1986, il Mulino, Bologna.
- European Commission (2005), *Working Together for Growth and Jobs: A New Start for the Lisbon Strategy*, http://ec.europa.eu/growthandjobs/index_en.htm (found 11 April 2008).
- European Commission (2007), *Strategic Report on the Renewed Lisbon Strategy for Growth and Jobs: Launching the New Cycle (2008–2010)*, http://ec.europa.eu/growthandjobs/index_en.htm (found 11 April 2008).
- Faini, R., J. Haskel, G. Barba Navaretti, C. Scarpa and C. Wey (2006), "Contrasting Europe's Decline: Do Product Market Reforms Help?", in T. Boeri, M. Castanheira, R. Faini and V. Galasso, eds., *Structural Reforms Without Prejudices*, Oxford University Press, Oxford UK, pp. 15–141.
- Gershenkron, A. (1962), *Economic Backwardness in Historical Perspective*, Harvard University Press, Cambridge, MA.
- Grossman, G. M. and E. Helpman (1994), "Protection for Sale", *American Economic Review* **84**, 833–50.
- Hoy, J., V. Galasso, G. Nicoletti and T. Dang (2006), "The Political Economy of Structural Reform: Empirical Evidence from OECD

- Countries", Working papers, No. 501, Economics Department, OECD, Paris, France.
- Kok, W. (2004), *Facing the Challenge: The Lisbon Strategy for Growth and Employment*, <http://ec.europa.eu/growthandjobs/pdf/2004-1866-EN-complet.pdf> (found 11 April 2008).
- Nickell, S. (1996), "Competition and Corporate Performance", *Journal of Political Economy* **104**, 724-46.
- Oates, W. (1972), *Fiscal Federalism*, Harcourt, Brace and Jovanovich, New York, NY.
- Olson, M. (1965), *The Logic of Collective Action*, Harvard University Press, Cambridge, MA.
- OECD (2002), "Product Market Competition and Economic Performance", *OECD Economic Outlook* **72**, 155-62.
- OECD (2007), "Going for Growth: Economic Policy Reforms", www.oecd.org/eco (found 11 April 2008).
- Pisani-Ferry, J. and A. Sapir (2006), "Last Exit to Lisbon", Bruegel Policy Brief No. 2006-02.
- Ruta, M. (2007), "Political Constraints to Growth in an Economic Union", Working paper, EUI, Florence, Italy.
- Sapir, A. (2004), *An Agenda for a Growing Europe: The Sapir Report*, Oxford University Press, Oxford, UK.
- Wolf, M. (2007), "Why Liberalism Is the Right Future for a Declining Europe", *Financial Times*, 13 March, p. 6.