



**HAL**  
open science

# From Competition to Constitution: Races to Bottoms and the Rise of 'Shadow' Social Europe

Eloi Laurent

► **To cite this version:**

Eloi Laurent. From Competition to Constitution: Races to Bottoms and the Rise of 'Shadow' Social Europe. 2007. hal-00972706

**HAL Id: hal-00972706**

**<https://sciencespo.hal.science/hal-00972706>**

Preprint submitted on 22 May 2014

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

*Center for European Studies*  
*Working Paper Series #137*

**From Competition to Constitution:  
Races to Bottoms and the Rise of  
“Shadow” Social Europe\***

by

**Éloi Laurent**

OFCE/Institute for Political Studies, Paris (Sciences-po)  
Center for European Studies, Harvard University  
[eloi.laurent@ofce.sciences-po.fr](mailto:eloi.laurent@ofce.sciences-po.fr)

**Abstract**

In this paper, I examine how the specific nature of economic integration in the European Union has affected member states' redistribution policies over the last two decades. More precisely, I attempt to detail the effect of social-tax competition between member states within social models, processes that I label “races to bottoms.” In this framework, I identify the emergence of an informal set of rules effectively constraining national redistribution policies in different ways, given the diversity of tax-social compacts in the EU. Because these rules are implicit and their effect generally underestimated, I gather them under the notion of “shadow” social Europe. Having empirically assessed the impact of this dynamic on the “continental,” the “Nordic,” the “eastern” and the “liberal” social-tax compact, I finally try to present a normative perspective and some policy options on this matter.

---

\*I thank Jacques Le Cacheux for guidance, idea-sharing and benevolence, and Jean-Paul Fitoussi for inspiration, support and patience. I also thank participants of the Center for European Studies Visiting Scholars seminar, especially Bo Rothstein and Art Goldhammer, for useful comments, and Andy Martin for a careful reading of a previous draft. The usual disclaimer applies.

*JEL Codes:* B52, D70, N24, N44.

*Keywords:* European Union, Redistribution policies, Social policies, Constitutional Political Economy, Tax competition, Race to the bottom, Social models, Country size.

*“Under the rule of individual property, the division of the produce is the result of two determining agencies: Competition, and Custom. It is important to ascertain the amount of influence which belongs to each of these causes, and in what manner the operation of one is modified by the other.”*

Mill (1848)

*“[...] competition of the kind we now have in mind acts not only when in being but also when it is merely an ever-present threat. It disciplines before it attacks.”*

Schumpeter (1942)

*“[...] only one thing is worse than being exploited by capital, and that is not being exploited by it.”*

Genschel (2004)

## **I. Prologue: the constitution of the EU**

As much as the ideas of “Europe” and “constitution” have been associated in the recent period, the constitutional perspective has generally been overlooked while assessing the state of European integration.

European economic and social policies are indeed constrained by a consistent and ordered set of rules that can be thought of both positively and normatively as a constitution (see Laurent & Le Cacheux, 2006). Some of those rules are explicit and written, such as the European central bank statutes, or the Stability and Growth Pact deficit and debt criteria. Some are implicit and informal. This paper is concerned with this latter type of European rules.

Because the Treaty of Rome (1957) drew a clear frontier between economic and social policies, it is often believed that European integration is somewhat schizophrenic. On the one hand member states share their national sovereignty by pursuing common economic policies; on the other hand they remain absolutely sovereign in the conduct of social policies. This frontier, if it existed in the very first decades of the European integration, has become imaginary since the Single Act (1986) came partially to reality with the achievement of the Single Market (1993). The gap between fiction and reality has widened in the course of the preparation and advent of the single currency. Actually, the Treaty of Rome itself explicitly aimed at this spill-over of economic integration onto social policies:

*“Member States agree upon the need to promote improved working conditions and an improved standard of living for workers, so as to make possible their harmonisation while the improvement is being maintained.*

*They believe that such a development will ensue not only from the functioning of the common market, which will favour the harmonisation of social systems, but also from the procedures provided for in this Treaty and from the approximation of provisions laid down by law, regulation or administrative action.”<sup>1</sup>*

---

<sup>1</sup>Article 117, *Treaty establishing the European Economic Community* (non-consolidated version), emphases added.

This vision has come into full effect, but with little acknowledgement. The European economic constitution (see Laurent & Le Cacheux, 2006) now constrains *social* as well as economic policies. Yet, an interesting distinction does persist between the economic and social provisions of this corpus. The peculiarity of social provisions, unlike most of the economic ones,<sup>2</sup> is that they have not resulted from a conscious and deliberate choice by member states, but from their *lack* of decision in the social domain and their contrasting resolution in the economic one. Moreover, the explicit set of soft rules referred to as “Social Europe” – the most recent byproduct of which is the “open method of coordination” brought about by the Lisbon summit in March 2000 – has far less impact on national redistribution policies than the processes studied in this paper, implied by the pace and asymmetric nature of European integration. Hence, the true “social Europe” remains in the shadows.

The present paper is ordered as follows: it starts by characterizing the nature of European integration in markets and policies as a three-dimensional process (Section 2). It then briefly looks back at the economic dynamic that gave birth to European social-tax compacts (“races to tops”) in the context of the first globalization (Section 3). Section 4 gives analytical substance to the notion of “races to bottoms” within European social-tax models. Section 5 assesses empirically the impact of the “European races to bottoms.” Section 6 finally presents some normative perspective and contemplates European policy options.

---

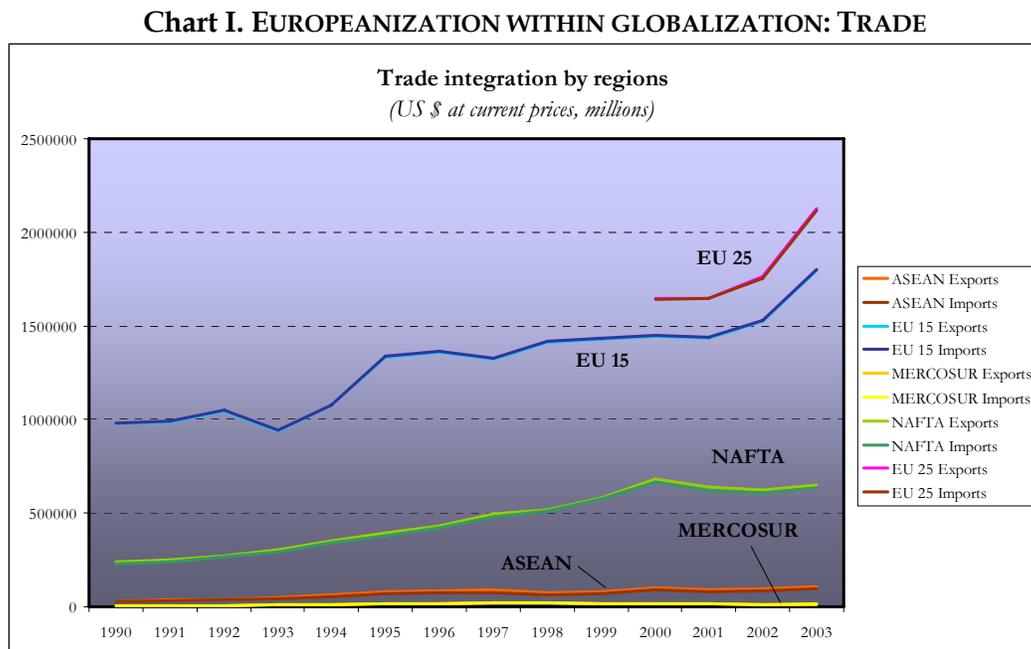
<sup>2</sup>Again, see Laurent & Le Cacheux, 2006.

## II. A portrait of European integration in three dimensions

Too often, the state of the public debate on economic and social policies in the EU remains “pre-Keynesian.” By this is meant that most economic and social variables (growth, unemployment, inequalities, etc.) are restrictively considered from the sole perspective of the dynamic of the labor market. As noted by Fitoussi & Leijonhufvud (2002), the major intuition of Keynes in the aftermath of the Great Depression was that unemployment could well have another origin than the labor market, so that macroeconomic policies and social policies had to be analyzed together in order to accurately understand and possibly remedy recessions, downturns and their dramatic consequences. This analysis stood in opposition to the partial equilibrium vision of Jacques Rueff in particular and neo-classical economists in general.

In an unfortunate throwback to pre-Keynesianism, the poor economic performance of the EU for the last fifteen years seems to have no other major explanation for many contemporary authors than inefficient labor markets.<sup>3</sup> Yet, in order to properly characterize the state of European integration and its impact (its depth and nature), one has to reason in three dimensions by considering the labor market as well as the capital market and the product market. What is more, the EU integration regime goes far beyond a collection of integrated markets. It also entails an integrated order of policies that gives markets coherence but also puts them into a hierarchical order. What is the state of integration in the EU when considered in “3D?”

First and foremost, as shown in Chart I, the EU has successfully instituted a market for goods among its member states, more than any region in the world. Intra-European trade in goods is also very dynamic in the most recent period while intra-regional trade tends to slow down or stagnate elsewhere.



Source : WTO.

<sup>3</sup>The most recent references include Sapir *et al.* (2003) and Kok (2004). See Fitoussi (2002), Creel, Laurent & Le Cacheux (2005) and Martin & Ross (2004) for a critique.

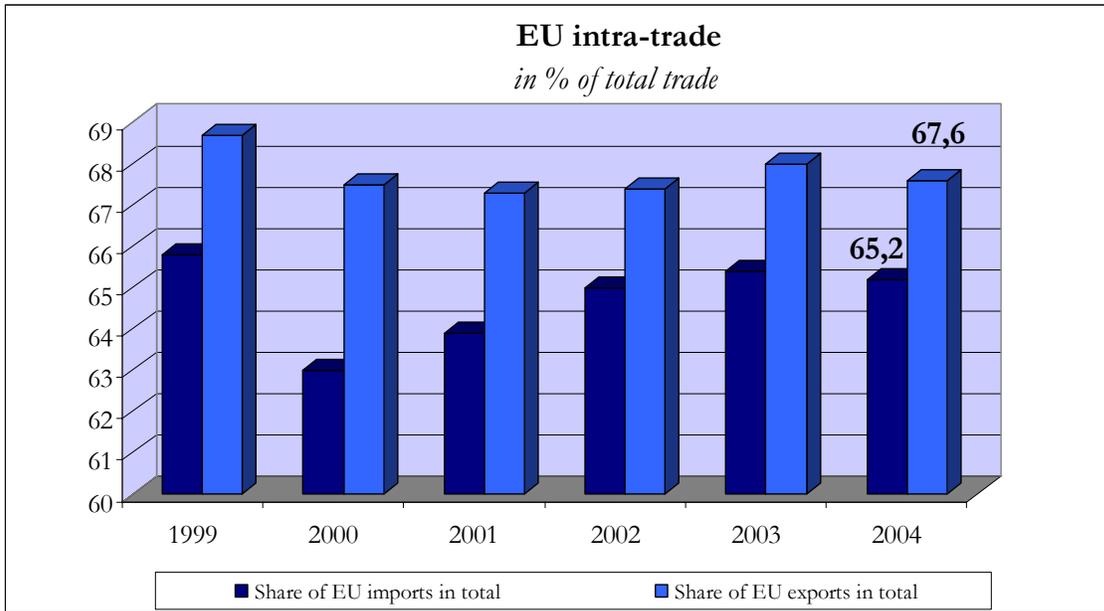


Chart II shows that, contrary to beliefs expressed most recently during the debate on the directive on services, trade in services not only is more important in the EU than in the rest of the world, but it is also as dynamic. However, by the simple fact that many services are not tradable, trade in services remains a fraction, albeit rising, of total trade in the EU (and the world).

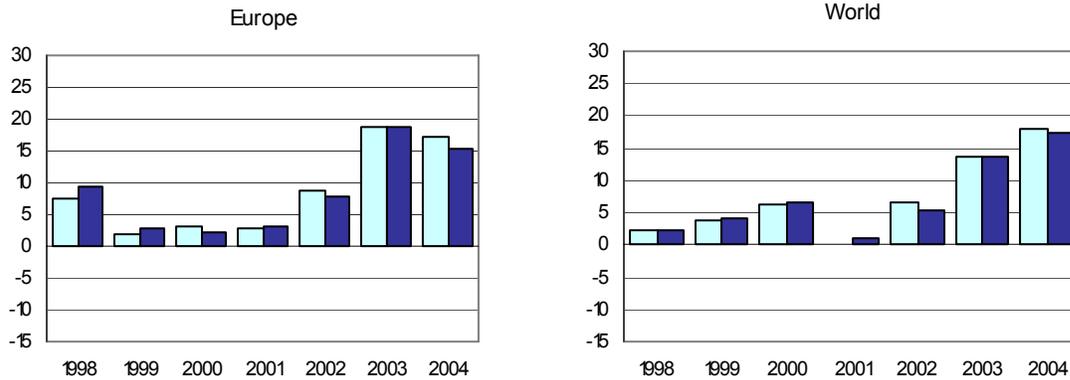
**Chart II. EUROPEANIZATION WITHIN GLOBALIZATION: SERVICES**

**Share of services trade in total trade in 2004**

*(billion \$ and %)*

	World	EU 25
<b>Merchandise</b>		
Exports	2100	1005
Imports	2081	948
Average	2090,5	976,5
<b>Commercial services</b>		
Exports	8880	3708
Imports	9215	3784
Average	9047,5	3746
<b>Share of services in total trade</b>	<b>18 %</b>	<b>20 %</b>

**Trade in commercial services**  
(annual percentage change in value)



Source: WTO and author's calculations.

Regarding factors of production, capital is clearly circulating at a very high speed in the EU. But the important and often understated reality is that if capital is obviously more mobile than any other product or factor (*cf. infra*), it is also more mobile in the EU than anywhere else in the world in a global context of capital mobility's acceleration, approximated by convergence of long-term interest rates (see Chart III).

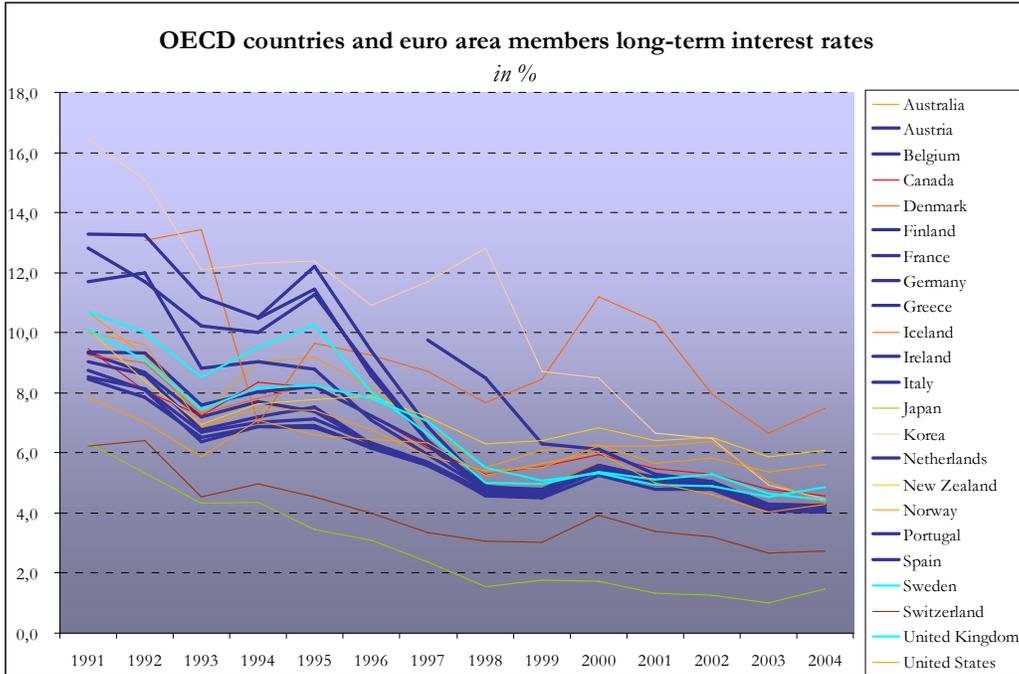
As is well known, the state of integration of labor markets is by far the weakest in the EU, which is hardly surprising given the persistence of the obstacle of language. The European Commission reports that "approximately 1.5% of EU-25 citizens live and work in a different Member State from their country of origin – a proportion that has hardly changed for the last 30 years." In terms of general residential mobility, it adds that "every year on average 7.2% of EU citizens change their place of residence, of which 15% refer to a change in job as the main reason for the move. This compares to 16.2 percent of U.S. citizens moving home each year, 17% for occupational reasons."<sup>4</sup>

Fligstein & Merand (2002) have collected similar evidence as to the depth of European integration. They go so far as to argue that what we call "globalization" is actually in great part "Europeanization," and conclude that European (sovereign) states have played a major role in building markets for European firms. While the first conclusion is obviously supported by the empirical evidence gathered in this paper, the second is not. European integration means more than product or factor integration. European member states have developed an impressive set of integrated policies, although it remains incomplete and even incoherent when assessed through the lens of the theory of regional integration (see Table I).

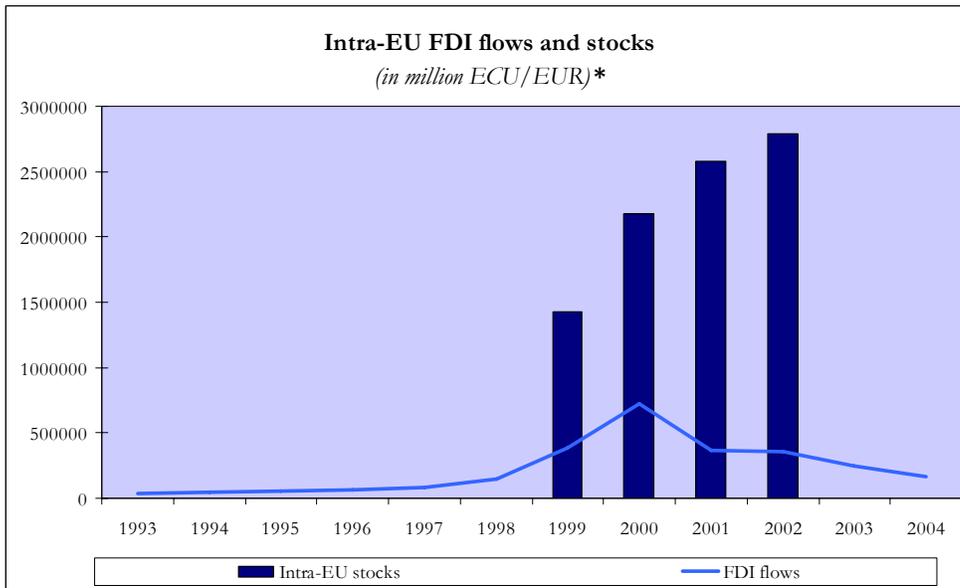
---

<sup>4</sup>"Labour markets in the 21 st Century," a joint U.S. & EU conference, U.S. Department of Labor, Bureau of International Labor Affairs, September 2002, [http://europa.eu.int/eracareers/index\\_en.cfm](http://europa.eu.int/eracareers/index_en.cfm)

### Chart III. EUROPEANIZATION WITHIN GLOBALIZATION: CAPITAL



Source: OECD.



\*EU is EU 15 until 2000 and EU 25 from 2001 onwards; flows are the average of intra-EU FDI inflows and outflows.

Source: Eurostat.

**Table I. EUROPEANIZATION WITHIN GLOBALIZATION: POLICY INTEGRATION**

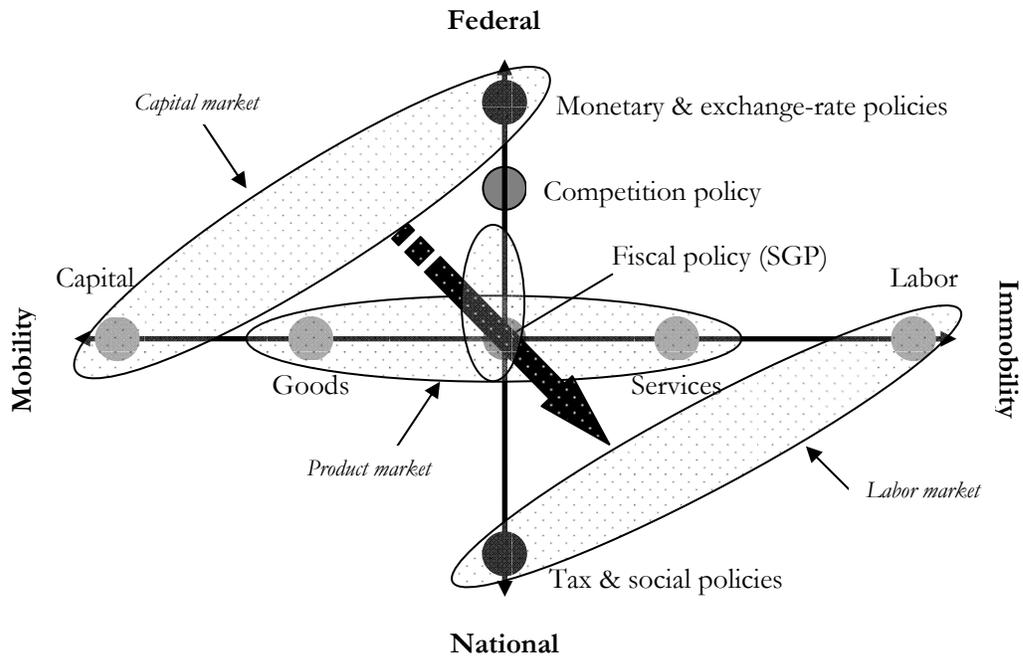
INTEGRATION STEPS ACCORDING TO BALASSA'S <sup>5</sup> TYPOLOGY	IMPLEMENTATION & TYPE OF ECONOMIC POLICY REQUIRED	COMPLETION & VALIDITY IN THE EURO ZONE AS OF 2006
<b>Free-trade area</b>	- Revocation of all customs duties and quotas.	- Achieved (between 1961 and 1968).
<b>Customs union</b>	- Common external tariff; - Common trade policy.	- Achieved (in 1968) ; - Enforced.
<b>Common market</b>	- Free movement of goods; - Free movement of capital; - Free movement of services; - Free movement of labor; - Free competition policy.	- Achieved since 1993; - Achieved since 1993; - <b>Incomplete;</b> - <b>Incomplete;</b> - Enforced.
<b>Economic union</b>	- Economic integration; - Economic policy coordination; - Structural adjustment.	- <b>Incomplete;</b> - <b>Partly achieved;</b> - <b>Partly achieved.</b>
<b>Economic and monetary union</b>	- Economic and financial union; - Unification of monetary policy & single currency; - Unification of taxation policy; - Unification of fiscal policy;	- <b>Incomplete;</b> - Achieved in 1999; - <b>Incomplete;</b> - <b>Incomplete.</b>

Source: Fitoussi & Laurent (2004), adapted from Balassa, B. (1961), *The Theory of Economic Integration*. Homewood, Illinois: Richard D. Irwin, Inc.

The general picture of European integration in three dimensions is thus a contrasted one, as represented on Chart IV.

<sup>5</sup>This typology was proposed by Balassa in 1961 to identify the successive steps of a coherent regional economic integration from a basic free trade area to the eventual introduction of a single currency.

**Chart IV. THE EU IN "3D:" AN ASYMMETRIC INTEGRATION**



At first glance, the European order of integration seems logical. Mobility (of inputs and outputs) corresponds to (policy) centralization, immobility is linked with decentralization. The three dimensions of European integration (market of capital, product and labor) can be reconstituted by associating inputs and outputs on the one hand (ranked on the immobility/ mobility axis) and policies on the other (ranked on the federal/national axis). In accordance with the data presented supra, the capital market is the most integrated, the product market is in an intermediary state of integration and the labor market is the least integrated of all.

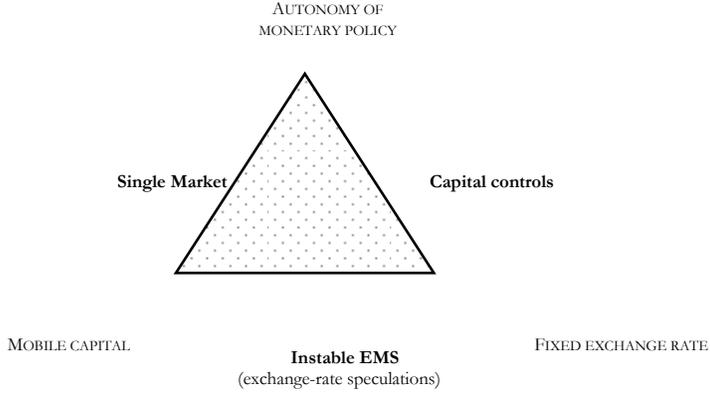
Yet, since economic policies and social policies are interdependent in the EU – fiscal policy (budgetary and tax policy), which is only intermediately centralized, being the main locus of this interdependence – this apparent logic runs into trouble. It gives way to an implicit hierarchy whereby what is mobile constrains what is immobile and what is centralized constrains what is decentralized (the direction of this influence is represented by the arrow). To put it differently,

European member states face a “new trilemma” between mobility, sovereignty and policy integration (Chart V).

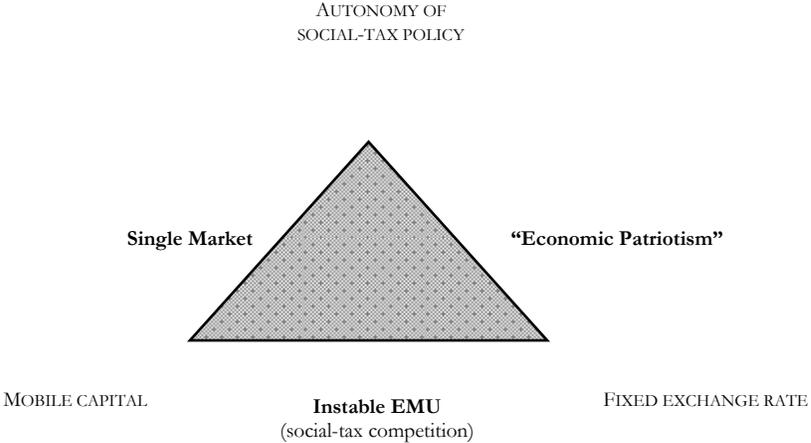
If the previous European trilemma (Mundell’s “triangle of incompatibility” between capital mobility, fixed exchange rates and autonomous monetary policy) was institutionally resolved with the abandonment of sovereign monetary policy through the creation of the single currency, the new trilemma (between an even higher capital mobility, totally fixed exchange rates, i.e., the single currency, and autonomy of social-tax policy) is for now *de facto* resolved by the heteronomy of social-tax policy (see following sections).

Before turning to the detail of this constraint by mobility through tax and social integration, a brief detour through the economic history of the constitution of European welfare states during the “first globalization” is likely to help us understand the dynamic interplay between factor mobility, products mobility and redistribution policies.

**Chart V. THE NEW EUROPEAN TRILEMMA**  
 The old European trilemma (Mundell’s triangle of incompatibility)



The new European trilemma



### III. “Social Europe” before Europe: “races to tops” in the “first globalization”

If we are to shed light on the economic dynamic at work and the pressures exerted on European welfare states in the course of European integration, a good starting point might be the analysis of the constitution of European welfare states during the first globalization.

Atkinson (2004) has established that the welfare state was constituted, although not in its full financial dimension,<sup>6</sup> in response to the booming trade and financial integration between 1870 and 1914. Building on this general argument, there are (at least) three consistent and compatible stories on the formation of European welfare states during this era.

Formalizing and empirically substantiating the analysis of Heckscher & Ohlin (1933) and later Stolper & Samuelson (1941), Williamson (2002), on the basis of earlier work conducted with O’Rourke (O’Rourke & Williamson, 1999), shows how mass migration induced a convergence in wages and standards of living during the first globalization between the old and the new world and within the new world. In particular, he argues that North-North mass migrations can account for 70 percent of the convergence between industrialized countries in terms of income per capita, leaving only 30 percent to other forces, among which capital integration. He also shows how protection and social legislation have been instituted to protect those standards of living in the face of trade integration.

Trade expansion and labor mobility thus induced wages and standards of living convergence across the Atlantic and within Europe with the eventual need to “compensate losers” from globalization effects by protecting them more efficiently from economic and employment insecurity, i.e., by building welfare states. This line of reasoning is quite similar to the “hypothesis of compensation,” according to which openness triggers protection (see Cameron, 1978 and Rodrik, 1998). Atkinson (2004) argues along the same line that “It was concern about the distributional impact of expanding trade and factor mobility that contributed to the setting in place of social security.” But this is only part of the story.

Berger (2003) displays evidence that the mobility of workers played a great role in diffusing the ideas of the new social-tax compact across Europe, especially between France and Germany. This “yardstick competition” (see *infra*) can explain why a “race to the top” occurred in welfare programs between sovereign but interdependent national states instituting one after the other progressive tax systems and distribution policies. In the words of Berger: “[A]t least at the level of political rhetoric, there is evidence of emulation and learning across borders that seemed to encourage a virtuous cycle of rising standards of social welfare.”<sup>7</sup>

But Berger’s main point is to show how the first globalization did not lead to “Social Europe.” The acceptance by French and European left-wing parties of international constraints did not result in the formation of an international or even a European welfare state, but national welfare models. The race to the top eventually became a “race to tops,” i.e., a separate building of redistributive social-tax compacts along national idiosyncrasies.

---

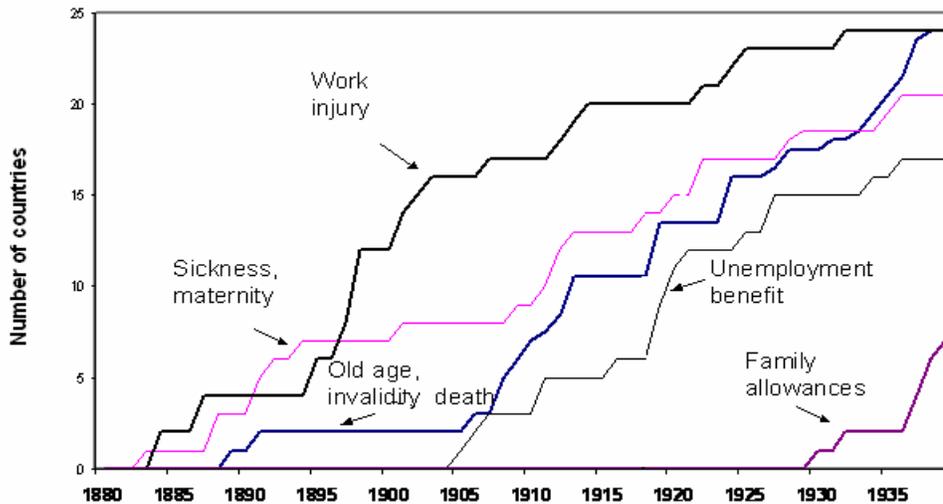
<sup>6</sup>Which was achieved during the interwar and postwar period, two periods of relative economic disintegration, see Tanzi, 2006.

<sup>7</sup>“The First Globalization: Lessons from the French,” English version of Berger (2003), available at <http://web.mit.edu/polisci/faculty/S.Berger.html>

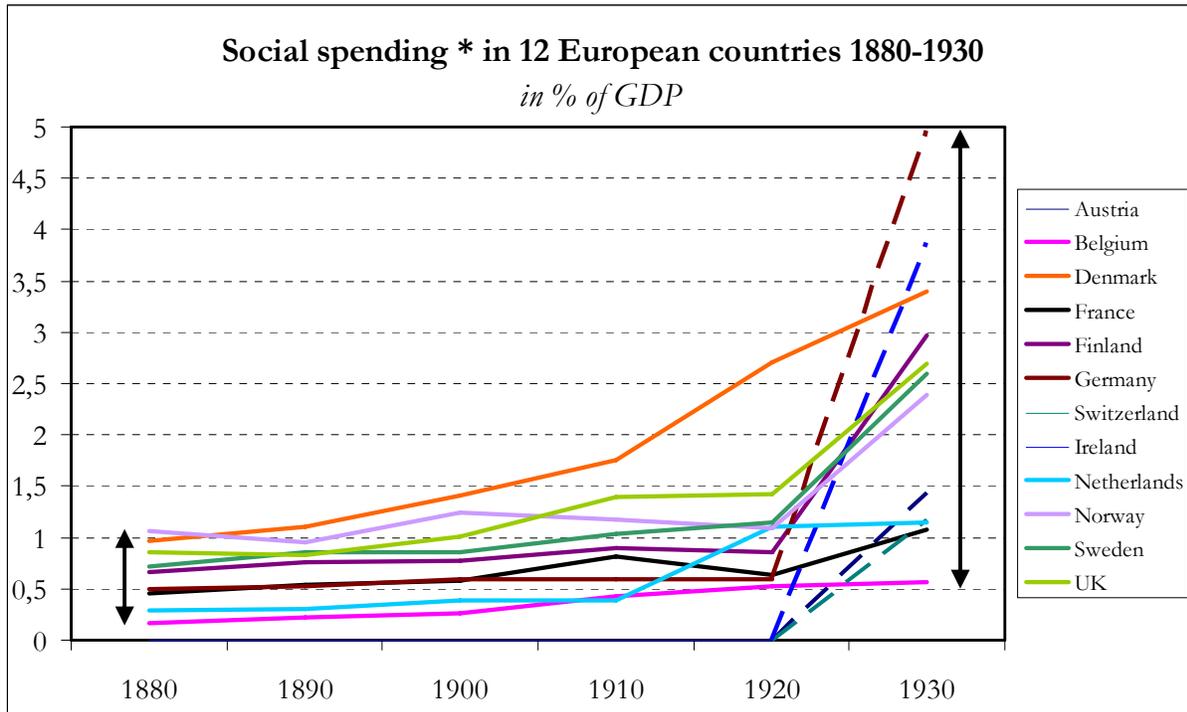
Lindert (2004) finally points out the decisive role of the diffusion of democracy and the greater availability of “voice” for workers in the constitution of the welfare state in Europe (and elsewhere). This final step is nothing short of crucial. The development of European welfare states was made possible by the development of European democracy. “Voice” was being heard as economic insecurity rose (see Lindert, 2004 and Laurent, 2005a).

Taken together, these developments resulted in the constitution of European welfare states, as empirically documented in Chart VI.

**Chart VI. EUROPEAN RACES TO TOPS: THE EVIDENCE**  
**Introduction date of welfare states programs in 24 European countries 1880-1939**



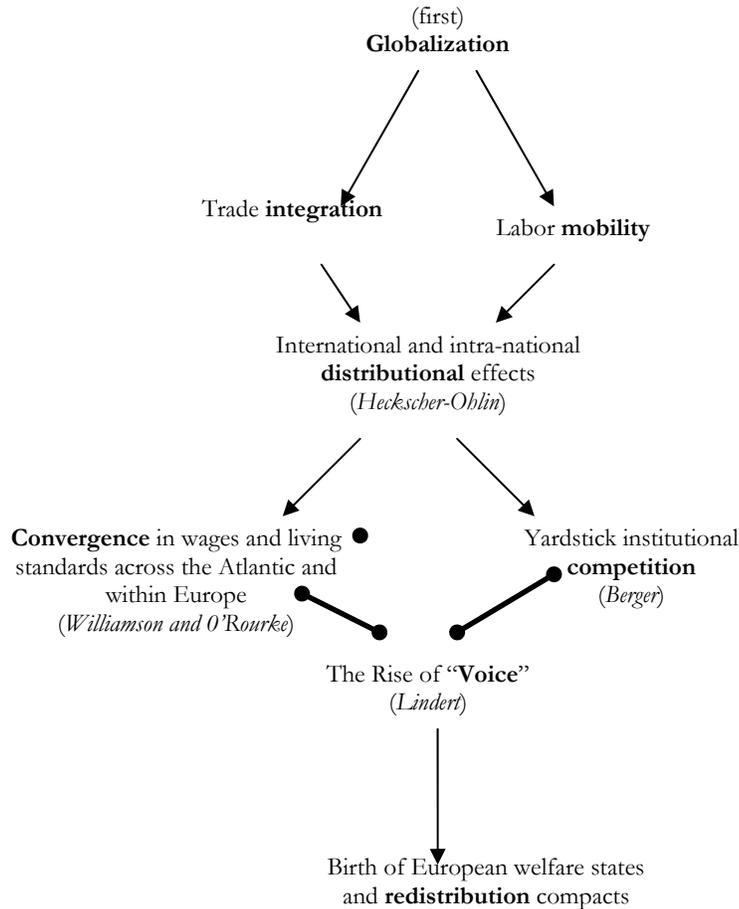
Source: Atkinson (2004).



\*Social spending includes welfare-unemployment, pensions, health and housing. *Source: Lindert (1994).*  
 From this schematic presentation of the political economy of the constitution of European welfare states, a question naturally emerges: why do these dynamics of integration seem to operate in reverse during the contemporary phase of “Europeanization?” If we can draw a line, as in Chart VII, from integration and mobility to convergence and upward competition and finally to redistribution, what is so different in the EU today? Why, as Atkinson (2002) rightly argues did “[G]lobalization pre-1914 [go] together with the introduction of the modern welfare state,” while “globalization today appears to presage its demolition?”

The hypothesis of Williamson (2002) and Berger (2003) is that labor’s mobility has been the cornerstone of the constitution of European welfare states during the first globalization. It will be argued in the next two sections that it is the mobility of capital that is mainly responsible for the constraint and possible demise of European welfare states in the contemporary period.

**Chart VII. EUROPEAN RACES TO TOPS: A SCENARIO**



#### IV. "Races to bottoms" in the EU: a theory

A broad way of characterizing the nature of the competition between states is to refer to it as an "institutional competition," to distinguish it from "organizational competition." This distinction draws on the definition given by North (1994) of "institution" (the "rules of the game") and "organization" (the players of the game). States are players that have the power to change the rules of the game in order to compete with other states, something firms, for instance, do not have.

This institutional competition between states develops primarily through "social-tax competition."<sup>8</sup> Since the seminal work by Tiebout (1956), a vast literature on tax competition has developed. The theoretical and empirical literature on tax competition alone is now quite large and continues to grow at high speed (see, for the general framework, Wilson, 1999, Oates, 1999 and Sinn, 2003 and for the EU, Le Cacheux et al. 1998, Le Cacheux, 2000, Le Cacheux & Saint-Etienne, 2005, Cnossen, 2003, Zodrow, 2003 and Laurent 2005b). Yet, the idea behind the more inclusive concept of social-tax competition is that the distinction between tax and social policies has little meaning given the influence that one exerts on the other. The process triggered in the tax domain will eventually spill over onto social policies (*cf. infra*).

Another way to insert the present paper in the literature is to say that among the many aspects now covered by the literature on tax competition, this paper is concerned with investigating the relation between mobility and redistribution. The exposition of the theoretical framework in which this investigation takes place can be found in Wildasin (2005), who tries at the same time to assess empirically the degree of economic integration and to detail the redistributive consequences of what he calls "fiscal competition,"<sup>9</sup> and Cremer & Pestieau (2004).

##### *The missing global race to the bottom*

Empirical evidence of a social-tax "race to the bottom" in the world (and the EU) is reputed to be as scarce as the theoretical literature on it is abundant (see Winner, 2005 for an exception). The concern expressed in the 1990s of a disappearing welfare state in the face of global integration, as noted by Genschel (2002), does not seem to have been validated by reality.

The usual argument for understanding this non-event is the so-called "frozen welfare state landscape" (Esping-Andersen, 1996) a variant of which may be "welfare resilience" (Pierson, 1996). For political economy reasons, the argument goes, nothing can really happen in modern welfare states, especially European ones. Yet, welfare states must cope with increasing pressures from global integration. Thus, the welfare state is caught up in a "permanent austerity" (Pierson, 2001), between "irresistible forces" and "immovable objects" (Pierson, 1998).

A less benign version of this constrained inertia is presented in Genschel (2002). In a counterfactual argument, the author subtly attempts to show that tax competition has had effects not on what actually happened within tax and social systems but on what did not happen, i.e., the road not taken of fiscal and social viability. "The welfare state is not trapped in a race to the bottom but boxed in between external pressures to reduce the tax burden on capital, on one hand, and internal pressures to maintain revenue levels and relieve the tax burden on labor, on the other"

---

<sup>8</sup>The notion was introduced by Fitoussi (1999).

<sup>9</sup>A concept designed to be more inclusive than tax competition, but still not encompassing social policies.

(Genschel, 2002). The author argues elsewhere along the same line that “[G]lobalization, rather than undermining the tax state, freezes it in its current form” (Genschel, 2005).

Yet, another argumentative strategy other than counterfactual analysis can be developed to assess the dynamic of states’ competition. It consists in acknowledging that the competition dynamic exists and that its effects have been felt, but they have not been correctly measured. Given the complexity of contemporary social-tax compacts, it is somewhat difficult to imagine that the effects of integration could be entirely and accurately captured by the mere evolution of total social expenditure or total tax revenues, as is often done in the literature.

Hence, on a theoretical level, at least two hypotheses compete. The first states that tax competition induces a lower general tax burden and erodes tax revenues. The second, “the compensation hypothesis,” implies that tax competition leads to a higher tax burden (more openness triggering more protection). To begin to grasp the true effect of social-tax competition, one has first productively to combine both theories. In a context of high economic integration, the tax burden is likely to be higher for immobile factors and lower for mobile factors. Further, this differentiated pattern has to be itself differentiated given the fact that its pressure is exerted on various social models pursuing distinct objectives.

#### *Why and how the EU deserves a closer look*

Many studies on tax competition, even those acknowledging the importance of the phenomenon on a global level (see Winner, 2005), overlook the basic facts of European integration. Social-tax competition is more likely to occur where integration is strong; the effects of social-tax competition are more likely to be stronger when welfare states are more developed and close to each other; social-tax competition is more likely to occur where there is no other adjustment instrument available in the face of integration and competition. These institutional features are exclusively European.

Indeed, variety is not a sufficient reason for competition. The stimulating theory of a new “systems competition” aimed at attracting “cross-border transfer of economic activities” because of globalization (Sinn, 2003) misses the simple point that national systems can cope with competition in globalization through the use of their economic policies. A much stronger effect is likely to take place when countries are part of an institutional regime where those instruments are not available anymore.

The case for a closer look at the EU relies on two simple points. The EU is more integrated in terms of market than the world and its integration comprises policies on top of markets (see Section 1). The EU has achieved integration between member states that themselves belong to social models.

#### *The European Union: integration in similar diversity*

For competition to develop, diversity has to coexist with integration. Integration in diversity is a key feature of the contemporary EU (see Scharpf, 2002). This matter of life is the result of the successive enlargements of the EU from 1957 onwards, since each enlargement enriched the European community (and then the EU) of a new social model.

Full Bismarckian systems (“continental”) historically formed the first European social model. They were mixed with partial Beveridgian systems (“residual”) in 1973. The two were then as-

sociated with partial Bismarckian systems (“Mediterranean”) in 1986 and, then, the three models were integrated with full Beveridgian systems (“Nordic”) in 1995.<sup>10</sup> Ultimately, Eastern systems joined the others in 2004.

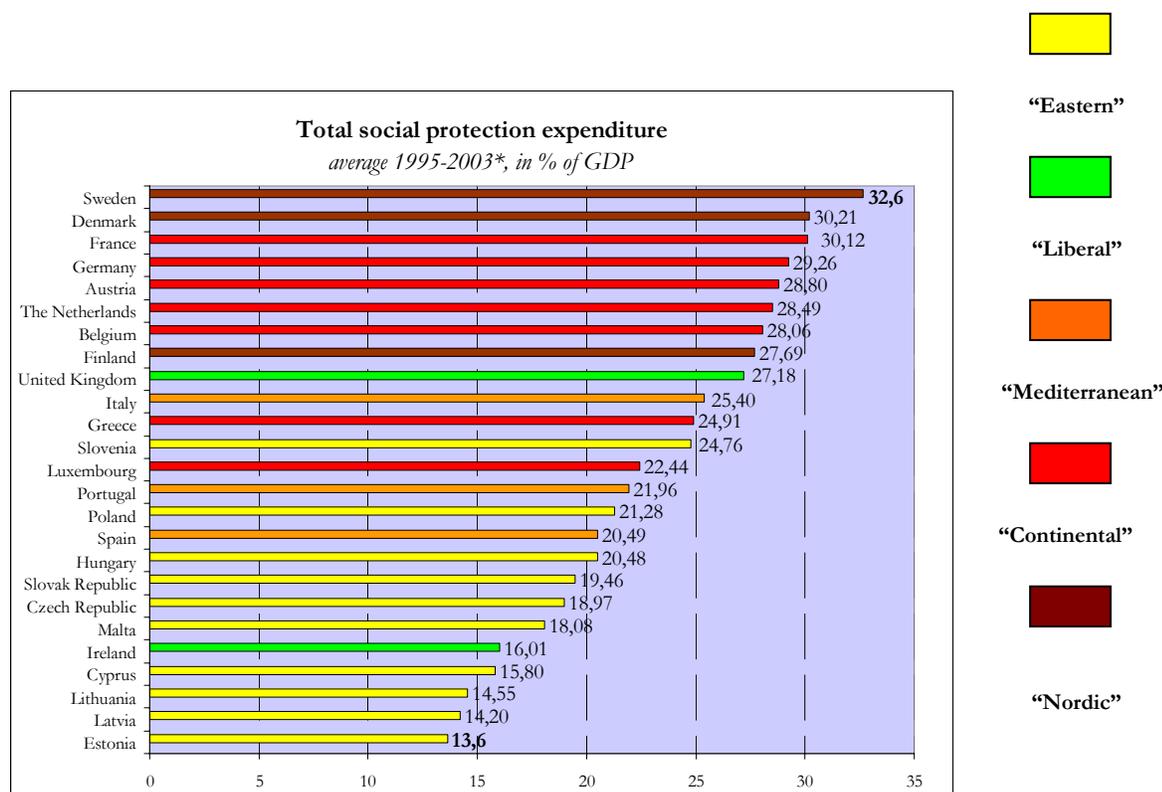
It is no wonder that the EU today is the most developed and diverse integrated economic region of the world in terms of social-tax compacts (see Chart VIII).

But if the EU deserves a closer look regarding social-tax competition, it should not be through the lens of inter-model competition. While the EU social debate in recent years has overwhelmingly focused on the perils of competition between models (especially eastern and western ones), the study of the impact of competition within models has been neglected.

If one would seek for a models’ convergence resulting from a “race to the bottom,” one would be making the same mistake than if one posited the existence of a “European social model.” Since *the* “European social model” does not exist (but European social models do), the quest for a race to *the* bottom is pursued in vain. But as argued supra, the disillusion has to go further. The question is not so much what is happening between the four models, than what is happening *within* the four models, between countries characterized by comparable social-tax compacts (in particular within the two most dynamic groups in terms of welfare reform, “Nordic” and “continental” countries). In this respect, the constant focus put on the question of the would-be East-West race to the bottom has been misplaced.

**Chart VIII. SOCIAL-TAX COMPACTS IN THE EU: UNITY IN DIVERSITY**

\*Series incomplete for Poland, Estonia, Lithuania, Latvia, Cyprus, Hungary. Source: Eurostat.



<sup>10</sup>See Laurent (2005b) for the well-known rationale of the European social typology.

*The myth of the European East-West race to the bottom*

The East-West social competition mythology relies on two pillars: one is the social standards competition, the other is the labor mobility driven competition.

It is true that European economic competition used to be about social standards. The “dirty competition” demonized by German jurists or the unfair competition disparaged by Mill was a trademark of the European nineteenth century. But this “social dumping” (see Alber & Standing, 2000) is not relevant for an analysis of the contemporary EU. The major reason why European competition is not about social standards anymore is because it has become an area where the EU has stepped in to enforce social legislation.<sup>11</sup>

European competition is also only marginally triggered by labor mobility. In this respect, social-tax competition in the EU is very different from the American variety of social competition, where labor migration plays a decisive role in triggering strategic interactions between states for fear of “welfare migration.”<sup>12</sup> The recent jurisprudence of the European Court of Justice regarding social regulation indeed indicates that “social tourism” is unlikely to develop in the EU (see Bosco, 2000). The Decker and Kohl decisions<sup>13</sup> seem on the contrary to stabilize the institutional coexistence between welfare regimes reinforcing the very first provisions of the Treaty of Rome on social security of migrant workers.

A powerful illustration of how weak the evidence is concerning labor mobility driven social-tax competition is given by the absence of economic and social dynamic triggered in the west of the EU by the eastern enlargement. It was supposed to imply mass migration as a result of an unprecedented gap in living standard. Despite the unprecedented gap, this migration has not happened so far (see Chart IX).

Another striking feature of the 2004 enlargement is that it did not either provoke massive financial outflows from the EU 15. FDI flows have remained low between EU 15 and EU 10, contradicting the fear of massive outsourcing from West to East (see Chart X). This empirical evidence, as well as the dynamic of corporate taxation, will be used later on. For now, it simply signals that the (social) action is not taking place between (eastern and western) models.

Summing up, it can be said that, if it exists, the European institutional competition is likely to rely on the immobility of labor (and not its mobility),<sup>14</sup> the mobility of capital, the mobility of goods, and finally on the constraint put on macroeconomic policies. We can more effectively capture the notion of European “races to bottoms” by referring to the literature on constitutional political economy.

---

<sup>11</sup>See Quintin & Favarel-Dapas (1999).

<sup>12</sup>See Brueckner (2000) for a theoretical overview and applications in the context of the AFDC and the welfare reform of 1996.

<sup>13</sup>ECJ 28 April 1998, Decker-case C-120/95, ECJ 28 April 1998, Kohl-case C-158/96.

<sup>14</sup>For an application of a labor mobility based model of social-tax competition to European social diversity, see Cremer & Pestieau, 2003.

**Chart IX. STANDARDS OF LIVING GAP AND LABOR MOBILITY BETWEEN EU 10 AND EU 15**  
**GDP per capita in 2004 (EU 25=100)**

Luxembourg	226	Cyprus	83
Ireland	137	Slovenia	79
Netherlands	124	Czech Republic	70
Austria	123	Malta	69
Denmark	122		
Belgium	118	Hungary	60
Sweden	117	Slovakia	52
United Kingdom	116	Estonia	51
Finland	112		
Germany	109	Poland	49
France	109	Lithuania	48
Italy	106	Latvia	43
Spain	98		
Greece	82		
Portugal	72		
Average/mean EU 15	118/116	Average/mean EU 10	60/56

Source: Eurostat.

Economic/social migrations between "old" and "new" Europe 2003-2005  
*Resident working age population*

<i>Destination</i>	<i>Origin</i>						
	2003	EU 15			EU 10		
		2003	2004	2005	2003	2004	2005
<b>EU 15</b>	2,0	2,1	2,1	<b>0,2</b>	<b>0,2</b>	<b>0,4</b>	
<b>EU 10</b>	NA	0,2	0,2	NA	0,1	0,2	

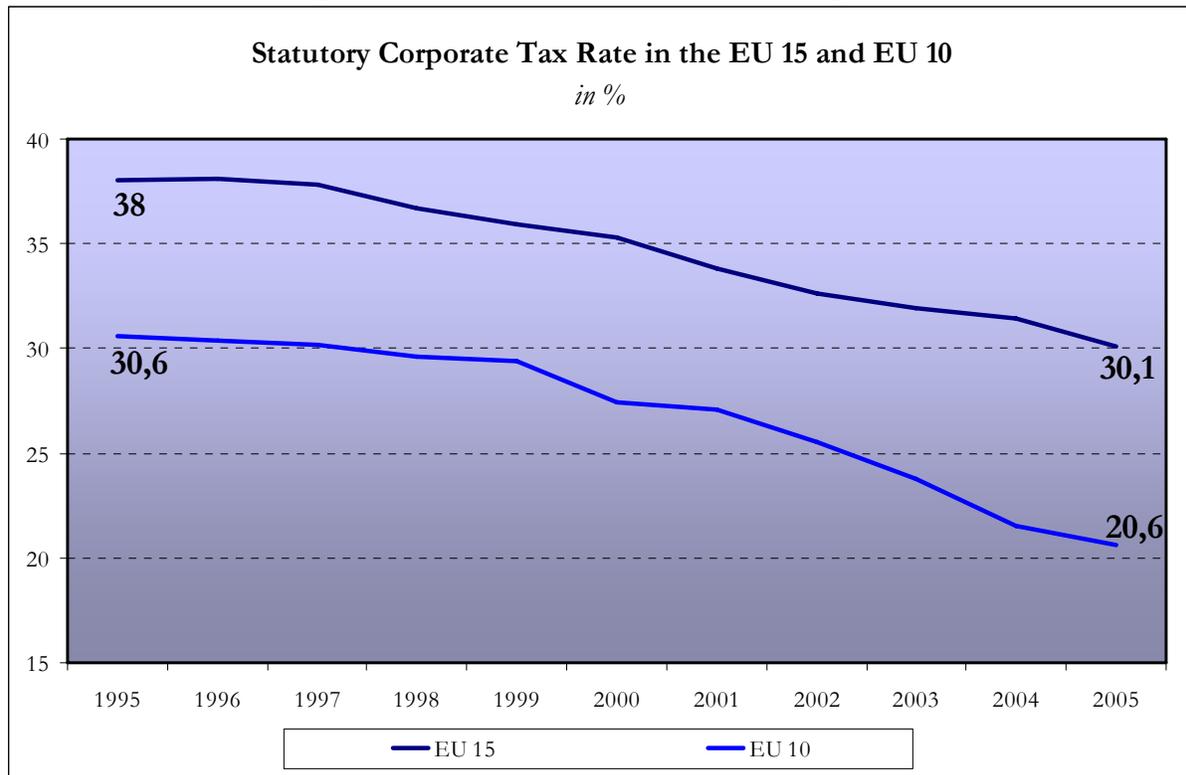
Source: Report on the Functioning of the Transitional Arrangements set out in the 2003 Accession Treaty (period 1 May 2004-30 April 2006), European Commission, Brussels, 2006.

**Chart X. LABOR MOBILITY AND TAX COMPETITION BETWEEN EU 10 AND EU 15**  
**FDI Flows 2001-2003**

	2001	2002	2003
<i>EU 25</i>	288.5	324.4	191.7
<i>From EU15 to New 10 Members</i>	17.2	13.1	6.9
<i>From 10 New Members to EU15</i>	0.7	0.8	0.5
<i>Between EU 15 Members</i>	270.3	309.6	183.7
<i>Between 10 New Members</i>	0.3	1.0	0.6

Source: Eurostat.

## Tax competition between “old” and “new” Europe 1995-2005



Source: Eurostat.

### *Competition as Constitution: the constitutional political economy of Social Europe*

Stressing the “the discipline of mobility,” Brennan & Buchanan (1980) note that: “Intergovernmental competition for fiscal resources and inter-jurisdictional mobility of persons in pursuit of ‘fiscal gains’ can offer partial or possibly complete substitutes for explicit fiscal constraints on the taxing power.” In other words, because mobility triggers institutional competition, competition can be a substitute for an explicit constitutional constraint.

Yet, it is important to understand that social-tax competition does not impose a single policy on states deeply involved in economic integration. It rather reduces available policy options to a determined set of public policies, as a constitution would. By constraining the possible choices and reducing policy options (e.g., the difference between left and right parties once they come into power), competition acts as a constitution.

European institutional competition is a competition by spillover. Private competition between organizations has triggered public competition between institutions. Before turning to the empirical evidence, it is possible to sum up the concern of this paper, based on the previous sections. Given the asymmetric integration and rich similar diversity in social models of the EU, has an increase in private competition coupled with a constraint on public means triggered a public competition whose consequence is a constraint on redistribution policies?

## V. Races to bottoms within the “continental,” “Nordic” and “Eastern” model: principle and evidence

*Capital mobility, corporate taxation, high-income taxation, income taxation, total taxation*

The golden rule of taxation established by Ramsey (1927) states that the higher the price elasticity of a factor, the less it should be taxed (“inverse elasticity rule”). In consequence, factors of production should be taxed according to their mobility. The more the economy is integrated, the more certain factors become mobile, the less they are likely to be taxed relative to more immobile ones.

If one assumes that European states are tax revenue maximizing “Leviathans,”<sup>15</sup> then generalized social-tax competition, i.e., on all factors because all are mobile, is bound to be efficient. But partial social-tax competition of the type described in this paper can hardly be seen as an efficient way to “tame” Leviathans’ power to tax. Rather, it will merely shift the burden of taxation from mobile to immobile factors (see Apolte, 2001).

Instead of Leviathans, it is assumed that European states are “intelligent dinosaurs” which tend slowly to adapt their tax structures and strategy in order to survive. In other words, European governments do need tax revenue and are willing to tax the most easily available sources in order to accumulate it. They also must respect their constituencies’ preferences, which are on average toward more redistribution than in other regions of the world. They finally must abide by the common rules constraining their macroeconomic policies.

An important point to grasp in this perspective is that taxation systems are *systems*. This means that their elements are interdependent so that the alteration of one component is likely to trigger a domino effect that will affect others, all linked in the revenue side of the budgetary constraint of the State. The important idea here is that it is not necessary that all elements of taxation systems face downward pressure for all elements to be affected by a downward pressure on one of them.

The central hypothesis that this section will try to prove is that capital mobility in the EU has triggered a spectacular fall in corporate taxation that in turn has triggered a spectacular fall in high-income taxation that in turn has affected personal income taxation and eventually the relative tax burdens put on capital and labor. This systemic effect has been reinforced by the existence of a strong European constraint on fiscal balance and by a “yardstick competition” between states (see *infra*). Capital mobility in the EU thus acts, through the systemic logic, on taxation systems and eventually on redistribution. The second part of the dynamic is that these related processes have to be differentiated according to their impact on social models.

As argued in Section 1 (see Chart III), capital is highly mobile in the EU, more than anywhere else in the world, including at the global level. In turn, the reduction of corporate taxation this mobility has triggered has been more important than anywhere else in the world.<sup>16</sup>

One way to measure this is to look at the reduction in statutory corporate taxation in the EU from 1979 to 2005 (see Chart XI).

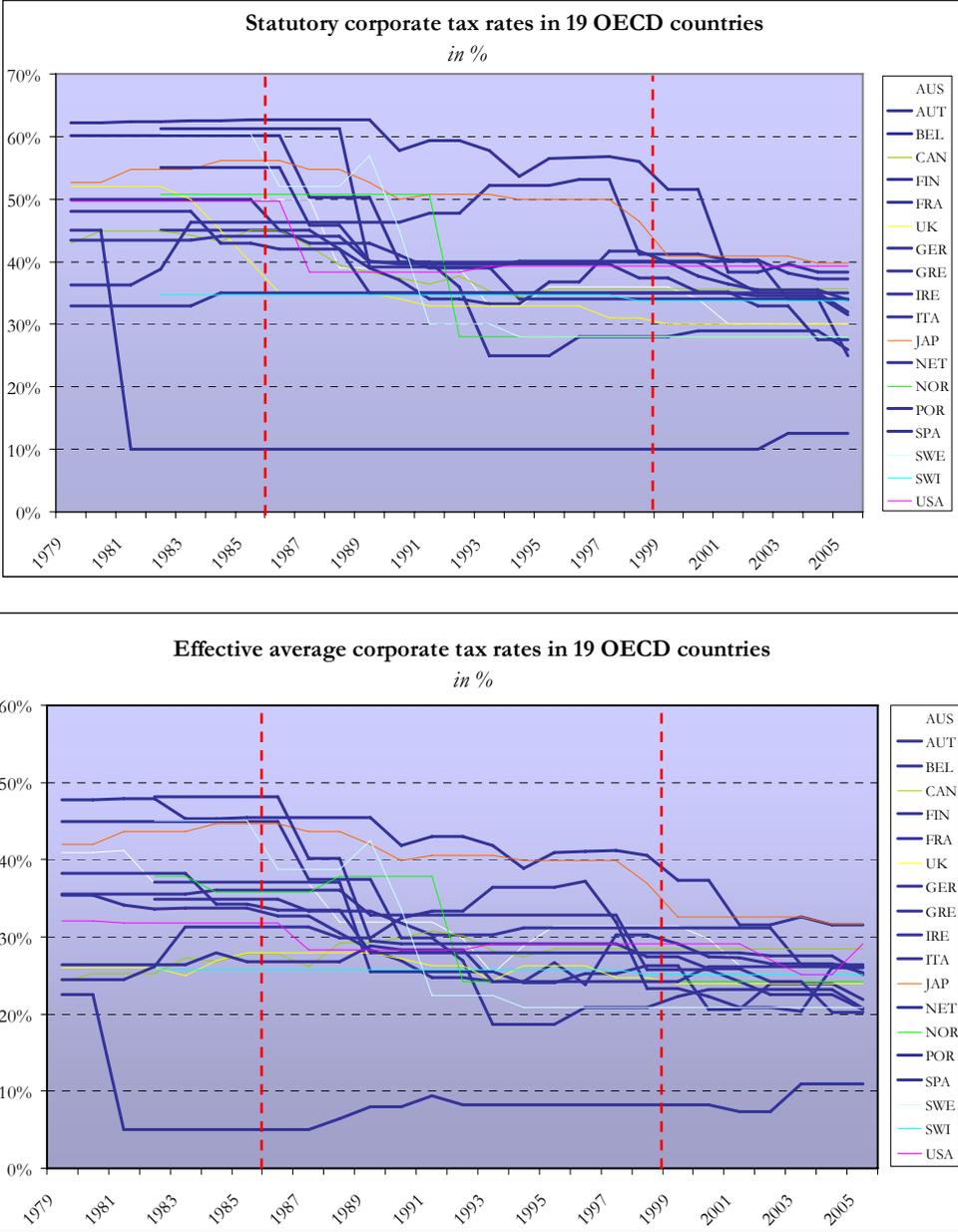
---

<sup>15</sup>See Brennan & Buchanan (1980).

<sup>16</sup>For a demonstration of the link between capital mobility and reduction in corporate taxation, see Krogstrup (2003) and Ganghof (2006).

But, as is well known, a reduction of nominal tax rates (statutory) may imply an actual increase in tax bases so that tax revenues remain constant (or even increase) and effective taxation remains unchanged. Indeed, a fall in tax rates is designed to attract more capital. Because tax competition “cleans its footprints” by enlarging the tax base after a tax rate cut, we have to look for a reduction in effective corporate taxation, taking into account this base effect. The result is no less impressive (see Chart XI) and allows us to concentrate on statutory tax rates.<sup>17</sup>

**Chart XI. CORPORATE TAXATION IN OECD AND THE EU**



Source: updated database from Devereux, M.P., R. Griffith and A. Klemm (2002), “Corporate income tax reforms and international tax competition” *Economic Policy* 35: 451-495, accessed at [http://www.ifs.org.uk/publications.php?publication\\_id=3210](http://www.ifs.org.uk/publications.php?publication_id=3210)

<sup>17</sup>For methodological choices between average statutory, average effective and marginal tax rates, see Devereux, Griffith & Klemm (2002).

Table II shows that the fall in statutory rates is the strongest among the other OECD countries considered, both in terms of average and standard deviation.

**Table II. STATUTORY CORPORATE TAXATION IN OECD AND THE EU\***

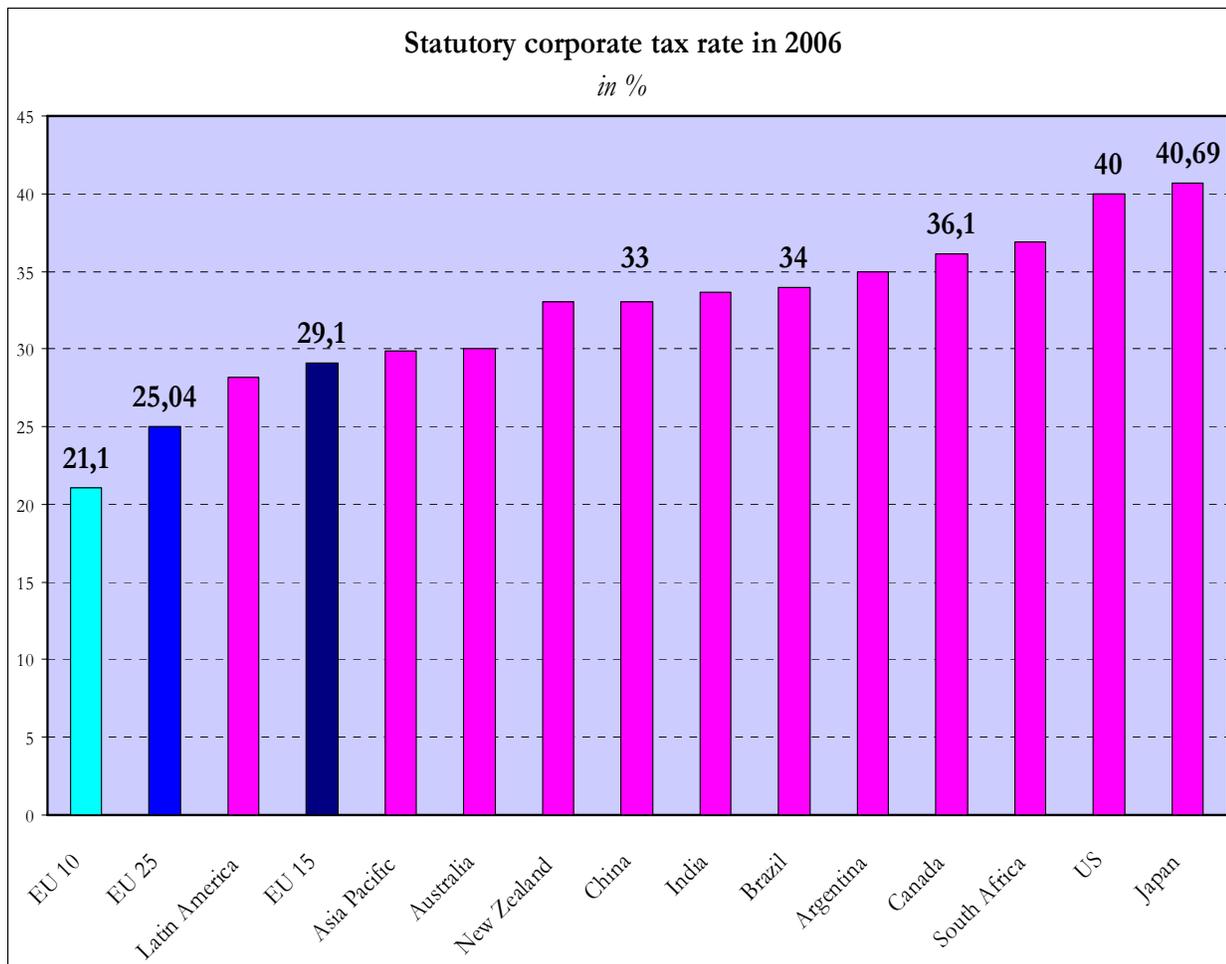
	Average OECD non-EU	Average EU	St. dev. OECD non-EU	St. dev. EU
<b>1979</b>	<b>0,49</b>	<b>0,48</b>	<b>0,04</b>	<b>0,10</b>
1980	0,49	0,48	0,03	0,10
1981	0,50	0,44	0,04	0,16
1982	0,47	0,48	0,07	0,15
1983	0,47	0,48	0,07	0,14
1984	0,47	0,48	0,07	0,14
1985	0,48	0,47	0,07	0,14
<b>1986</b>	<b>0,48</b>	<b>0,46</b>	<b>0,07</b>	<b>0,14</b>
1987	0,45	0,44	0,08	0,13
1988	0,43	0,44	0,08	0,13
1989	0,42	0,41	0,07	0,13
1990	0,42	0,38	0,07	0,11
1991	0,42	0,37	0,07	0,11
1992	0,38	0,37	0,07	0,11
<b>1993</b>	<b>0,37</b>	<b>0,36</b>	<b>0,08</b>	<b>0,12</b>
1994	0,37	0,35	0,08	0,11
1995	0,37	0,36	0,07	0,12
1996	0,37	0,36	0,07	0,12
1997	0,37	0,36	0,07	0,12
1998	0,36	0,35	0,06	0,10
<b>1999</b>	<b>0,36</b>	<b>0,35</b>	<b>0,05</b>	<b>0,10</b>
2000	0,35	0,34	0,05	0,10
2001	0,35	0,33	0,05	0,08
2002	0,35	0,33	0,05	0,08
2003	0,35	0,32	0,05	0,07
2004	0,34	0,32	0,05	0,07
<b>2005</b>	<b>0,34</b>	<b>0,30</b>	<b>0,05</b>	<b>0,07</b>

\*EU is the EU 15 minus Luxemburg and Denmark. OECD non-EU is the U.S., Switzerland, Norway, Japan, Australia and Canada.

Source: updated database from Devereux, M.P., R. Griffith and A. Klemm (2002), "Corporate income tax reforms and international tax competition" *Economic Policy* 35: 451-495, accessed at [http://www.ifs.org.uk/publications.php?publication\\_id=3210](http://www.ifs.org.uk/publications.php?publication_id=3210) and author's calculations.

The overall result of this downward competition in terms of corporate taxation is shown in Chart XII. According to the latest KPMG Corporate Tax Survey (KPMG, 2006), the EU now has the lowest corporate taxation of all regions in the world.

**Chart XII. CORPORATE TAXATION: HOW THE EU COMPARES TO THE WORLD**



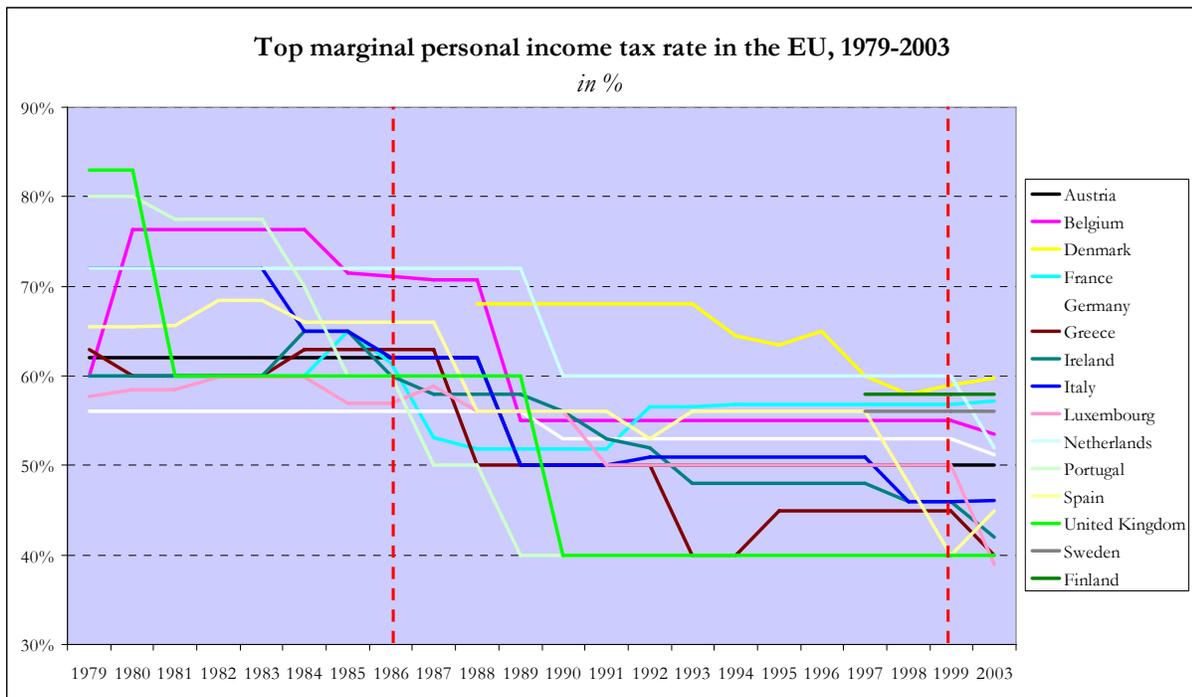
Source: KPMG (2006) and author's calculations.

One reason for this dramatic result is obviously the fact that the EU 10 exhibits a smaller corporate taxation on average than the EU 15. Yet, once again, the popular East-West race to the bottom perspective would be misleading. European competition on corporate taxation originated in what is now the EU 15 as early as 1986, not in the EU 10, which most likely followed the trend in preparation for accession (as shown in Chart X) rather than set the tone. The overall low European corporate tax rate can thus be said to result from a dynamic triggered in the "old" EU.

How does corporate taxation connect to high-income taxation? Following Ganghof (2005a), it can be argued that corporate taxation is tightly linked to high-income taxation by the systemic logic. The latter implies that personal income can be converted into corporate income if the taxation gap between the two is too large. Hence, one has to closely follow the other.

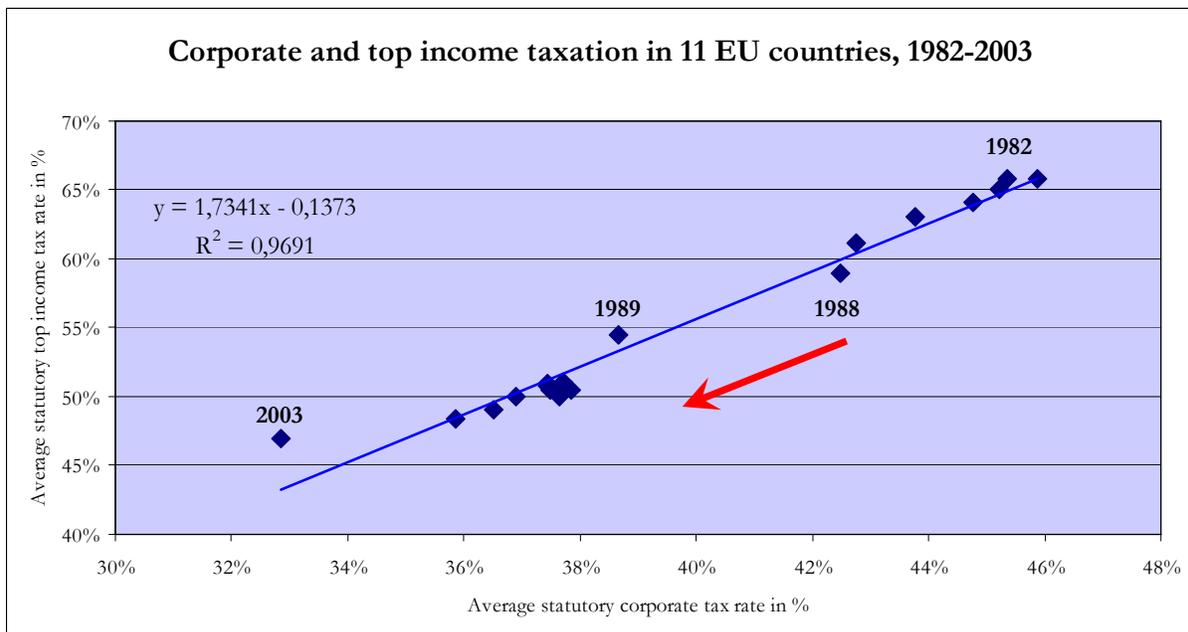
Indeed, high-income taxation in the EU 15 seems to have followed a similar path to corporate taxation (Chart XIII). Here also the reduction has been impressive: from 66 percent in 1979 to 51 percent in 1993 and to 49 percent in 2003.

**Chart XIII. HIGH INCOME TAXATION IN THE EU AND CORPORATE VS TOP INCOME**



Note: series jump from 1999 to 2003 but data are homogenous.

Source: 1979-1999: OECD, table accessed at Tax Policy Center, <http://www.taxpolicycenter.org/home/>;  
2003: Conseil national des impôts, 2004, *La Concurrence fiscale et l'entreprise*, <http://www.ccomptes.fr>



Note & Source: see above.

Next, one has to look more closely at the apparent relation between high-income and corporate taxation. As suggested by the basic regression shown in Chart XIII, the two dynamics seem very closely coupled. However, in this relation between corporate taxation and high-income taxation, one has to consider an alternative or complementary hypothesis, namely that high-income taxa-

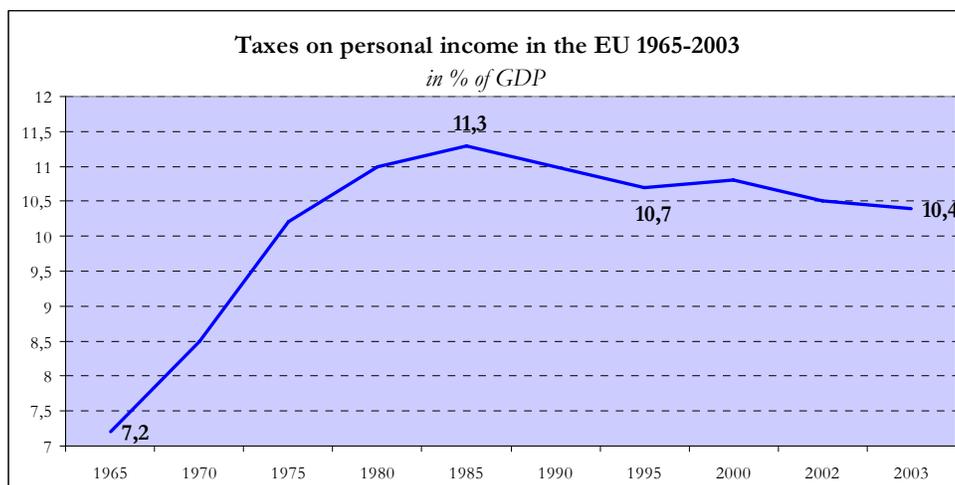
tion has fallen in response to the increased mobility of high-skilled labor. It is certainly true that skilled labor is more mobile than unskilled labor, but it is far less mobile than capital. So the effect of mobility on high-income taxation is much more likely to be triggered by the possibility to convert wage income into capital income than by the possibility to escape personal income taxation by geographical exit.

In both corporate and high-income taxation cases, a consistent chronological sequence emerges. The two turning points (logically) appear to be the launching of the Single Market from 1986 on, and that of the single currency, from 1999 onwards. Those two sequences (the first one being stronger than the second) prove to be of general relevance in the development of social-tax competition in the European community and then the EU.

The effect on personal income taxation also follows this pattern, as shown in Chart XIV.

**Chart XIV. TAXES ON PERSONAL INCOME 1975 TO 2003 IN THE EU**

	1965	1970	1975	1980	1985	1990	1995	2000	2002	2003
Austria	6.8	7.0	7.9	9.0	9.4	8.3	8.6	9.5	9.9	9.9
Belgium	6.4	8.7	13.2	15.4	16.2	13.8	14.6	14.3	14.6	14.3
Denmark	12.4	19.1	22.4	22.9	23.9	25.4	26.6	25.9	26.1	25.6
Finland	10.1	12.5	14.3	13.0	15.0	15.4	14.3	14.7	14.3	13.9
France	3.7	3.6	3.8	4.7	4.9	4.5	4.9	8.0	7.5	7.6
Germany	8.2	8.6	10.6	11.1	10.7	9.8	10.2	9.4	8.9	8.5
Greece	1.4	2.2	1.9	3.6	4.0	4.1	3.9	5.6	5.1	4.9
Ireland	4.2	5.3	7.3	10.0	11.0	10.7	10.1	9.6	7.5	7.9
Italy	2.8	2.8	4.0	7.0	9.2	10.2	10.7	10.8	10.9	10.8
Luxembourg	6.9	6.4	10.3	11.0	11.5	9.6	9.2	7.4	6.7	7.1
Netherlands	9.1	9.5	11.2	11.4	8.3	10.6	7.9	6.2	7.2	6.9
Portugal						4.6	5.9	6.0	5.8	5.8
Spain	2.1	1.8	2.6	4.6	5.3	7.0	7.5	6.5	6.7	6.5
Sweden	17.1	19.2	19.4	19.4	18.7	20.5	16.2	17.7	15.2	15.8
UK	10.1	11.7	14.1	10.3	9.8	10.7	10.0	11.0	10.6	10.2
<b>EU15</b>	<b>7.2</b>	<b>8.5</b>	<b>10.2</b>	<b>11.0</b>	<b>11.3</b>	<b>11.0</b>	<b>10.7</b>	<b>10.8</b>	<b>10.5</b>	<b>10.4</b>

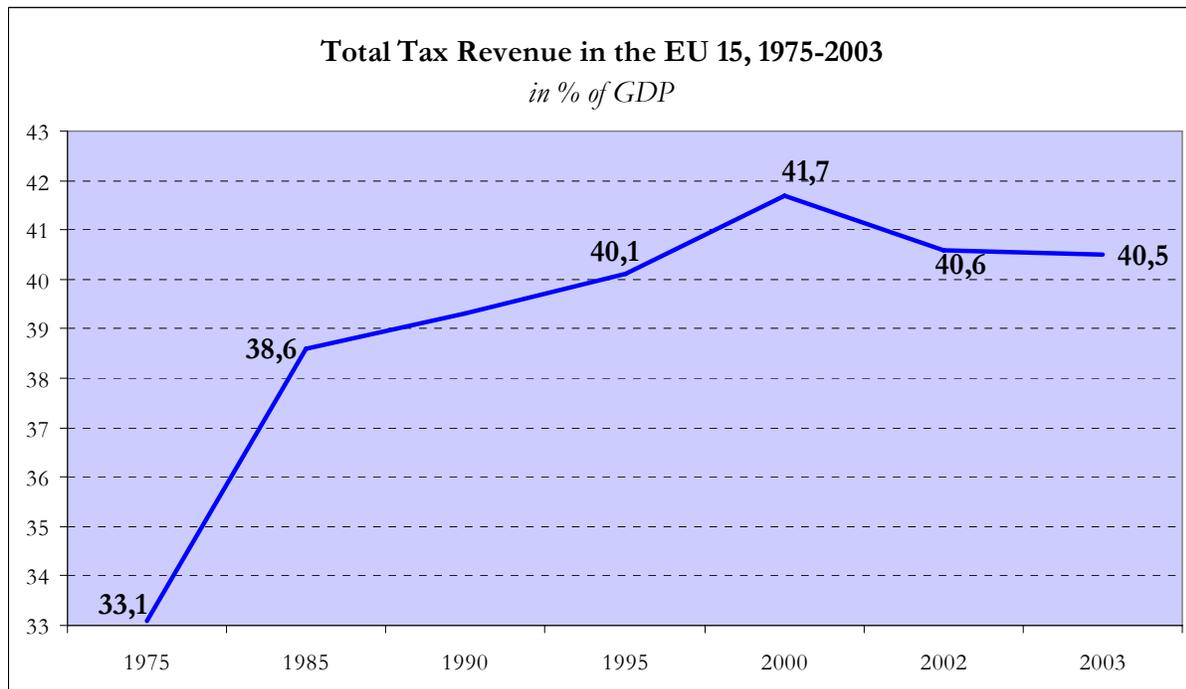


Source : OECD.

The final effect of this dynamic on total tax revenues, showed on Chart XV, is apparently mixed since revenues appear to be more or less stable, despite these dramatic evolutions.

**Chart XV. TOTAL TAX REVENUE FROM 1975 TO 2003 IN THE EU**

	<i>In% of GDP</i>						
	1975	1985	1990	1995	2000	2002	2003
Austria	36.7	40.9	39.6	41.1	42.6	43.6	43.1
Belgium	40.6	45.6	43.2	44.8	45.7	46.2	45.4
Denmark	40.0	47.4	47.7	49.5	50.1	48.7	48.3
Finland	36.8	40.2	44.3	46.0	48.0	45.8	44.8
France	35.5	42.4	42.2	42.9	44.4	43.4	43.4
Germany	35.3	37.2	35.7	37.2	37.2	35.4	35.5
Greece	21.8	28.6	29.3	32.4	38.2	37.1	35.7
Ireland	29.1	35.0	33.5	32.8	32.2	28.7	29.7
Italy	26.1	34.4	38.9	41.2	43.2	42.5	43.1
Luxembourg	37.5	45.1	40.8	42.3	40.6	41.3	41.3
Netherlands	41.3	42.8	42.9	41.9	41.2	39.2	38.8
Portugal	20.8	26.6	29.2	33.6	36.4	36.5	37.
Spain	18.2	26.9	32.1	31.8	34.8	34.8	34.9
	1975	1985	1990	1995	2000	2002	2003
Sweden	42.0	48.2	53.2	48.5	53.9	50.1	50.6
UK	35.3	37.7	36.5	35.1	37.5	35.6	35.6
<b>EU15</b>	<b>33.1</b>	<b>38.6</b>	<b>39.3</b>	<b>40.1</b>	<b>41.7</b>	<b>40.6</b>	<b>40.5</b>



Source: OECD.

Hence, we have to look for a distribution effect inside the taxation system to follow with the logic of our investigation, i.e., for a dynamic of the respective tax burdens placed on the different factors of production.

### *The dynamic of tax burdens*

One first has to understand the taxation structure in the EU (as shown in Chart XVI) in order to grasp the importance on average of the different components of European taxation systems.

**Chart XVI. TAXATION STRUCTURE AND DYNAMIC IN THE EU**

Taxation structure in 2003, in % of total taxes

Taxes on corporate income	<b>8,1</b>
Taxes on personal income	<b>25</b>
Taxes on property	<b>5,2</b>
Social security contributions	<b>28,8</b>
Taxes on goods and services	<b>30,4</b>

*Source: OECD.*

Taxation evolution, in % of GDP by degree of exposure to competition

	1990	2003	Differential 1990-2003
Taxes on income and profits	13,8	13,7	<b>- 0,1</b>
Taxes on general consumption	7	7,6	<b>+ 0,6</b>
Social security contributions	11	11,6	<b>+ 0,6</b>

*Source: OECD and author's calculations.*

A first glance at what happened to mobile and immobile elements of taxation is taken in the second table of Chart XVI. It seems that, in line with the framework set in the previous section, the tax burden has shifted in the EU from mobile to immobile components, but in a small measure. But more precise empirical evidence concerning the respective taxation of mobile and immobile elements between 1986 and our time is available and the story here also seems to unfold in two stages.

The first dynamic occurred between 1986 and 1993 and was analyzed by the European Commission itself. The European Commission (1996) noted that "while the taxation of labour has been increasing, the taxation of factors of production other than labour has shown an overall decrease" and that "the stability of total tax revenues has been achieved at the cost of a progressive alteration in the structure of taxation: the tax burden has been shifted to the less mobile tax base - labour - in order to recover the tax lost from the erosion of other more mobile bases." The Euro-

pean Commission estimates that “[B]etween 1980 and 1993, the implicit tax rate<sup>18</sup> on employed labour for the Community as a whole grew by about one fifth while the same indicator for other factors of production - mainly self-employed labour and capital - decreased by more than a tenth.”

The European Commission (1997) similarly stated that “over the last 15 years ... the implicit tax rate on employed labour has increased by more than 7 percentage points, whereas the same rate for other factors of production (capital, self-employed labour, energy, natural resources) has decreased by more than 10 percentage points.” A graphic representation of this evolution is reproduced in Chart XVII.

The second graphic represents the evolution of tax burdens from the introduction of the euro onwards as empirically estimated by Eurostat. If, here again, the dynamic appears to have been more important between 1986 and 1995, it has clearly been reinforced between 1999 and 2003.

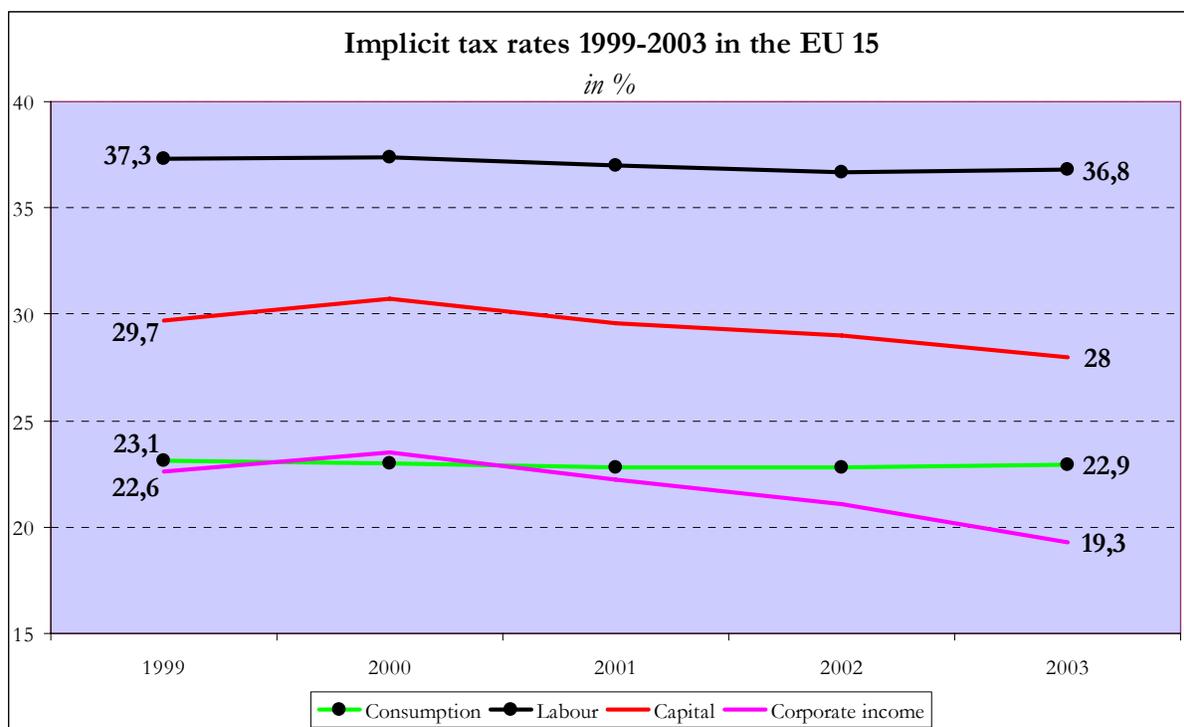
Given this general evolution whereby mobility of capital has affected capital taxation and eventually the relative tax burdens placed on immobile and mobile bases of taxation systems in the EU, we now have to differentiate the final impact on member states’ social policies.

**Chart XVII. IMPLICIT TAX RATES ON LABOR AND OTHER FACTORS, THEN AND NOW**



Source: European Commission (1997).

<sup>18</sup>“From a macroeconomics point of view, a tax rate is calculated by dividing the revenues from taxes on a special activity or good by an appropriate corresponding aggregate tax base from national accounts statistics. This yields the implicit tax rate (ITR), sometimes also referred to as an average or effective tax rate.” Source: Coded, Eurostat, <http://forum.europa.eu.int/irc/dsis/coded/info/data/coded/en.htm>



Source: Eurostat.

#### *How size matters in races to bottoms*

Country size,<sup>19</sup> first studied by Bucovetsky (1991) and Wilson (1991), plays an important role in social-tax competition. Dehejia and Genschel (1999) describe the issue of the size of the tax base as a trade-off between the loss of domestic revenue and the gain of foreign revenue resulting from a reduction in taxation. The smaller the country, the more the trade-off leans toward lower rates and pushes for tax competition. Another reason why small countries tax capital less is that small countries can get away much more easily than large ones in terms of retaliation. Hence, small countries will have more interest in taxing capital less. The larger the country, the smaller the pressure to tax capital less.

This explains why large countries have on average higher corporate taxation than small countries in the EU (see Chart XI). Another way to put it is to stress that the effect of tax competition is more severe on small economies than on large ones when both compete, since small economies will witness higher losses of per capita capital than large economies.

In this respect, Kanbur and Keen (1993) argue and show “that differences in (country) size exacerbate the inefficiencies of non cooperative behavior” in taxation. It will be argued in the next subsection that this line of reasoning is true in the EU, but in a different way than intended by the authors. Small countries actually appear to have more incentive to cooperate among themselves in terms of taxation than large ones within social models.

<sup>19</sup> For a more general argument on the “size nexus” in the EU, see Laurent & Le Cacheux (2006).

*Social tops and bottoms in the EU*

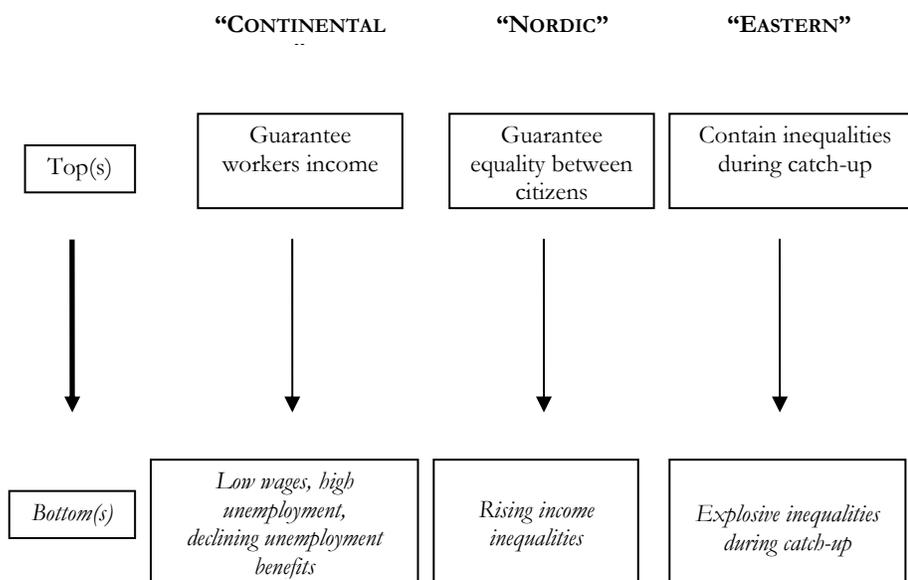
As noted earlier, social-tax compacts differ in the EU but they differ in similar ways. National social-tax systems can be grouped under “model” characterization and the fundamental objectives of the non-residual models are not the same (see Chart XVIII).

The “continental” model (closer to Bismarck’s ideal) was designed to safeguard the income of workers. The “Nordic” model (closer to Beveridge’s vision) aims at guaranteeing equality between citizens. The “eastern” model has no explicit objective, but one can safely assume that it will fulfill its vocation if it manages to contain inequalities during the catch-up phase, thus limiting the strain put on democracy in the EU 10. Because I assume that these models pursue those specific objectives, I assess their performance on this basis.

The general effect in terms of taxation and tax burdens shifting will first be differentiated between the different models. It will be shown that the “Nordic” group, made up of small countries, better resists to competition in terms of efficiency but with serious consequence in terms of income inequalities. Within the “continental” model, the consequence is felt through the downward pressure put on wages given the tax burden on labor and the development of “social devaluation” policies. Finally, within the eastern model, the consequence of capital mobility is felt through potentially explosive inequalities.

In assessing the dynamic of competition or cooperation, one should keep in mind that social-tax competition within social models is driven primarily by mobility of factors (“competition à la Tiebout”) but also secondarily by mobility of information, i.e., a competition driven by comparison, anticipation or imitation (“yardstick competition”, see Salmon, 2005).

**Chart XVIII. NON-RESIDUAL SOCIAL-TAX COMPACTS IN THE EU: CONTRASTING OBJECTIVES**



*The race to the bottom within the “continental” model*

The general dynamic of the competition within member states belonging to the “continental” model is shown in Chart XIX.

Adding the macroeconomic constraint to the picture of social-tax competition is crucial. Large states need macroeconomic stabilization more than small ones (see Laurent & Le Cacheux, 2006). States actually try to use exchange-rate, monetary or fiscal policy to avoid the effects of social-tax competition while competing efficiently for mobile factors. When those instruments are no longer available because they are seriously constrained, large states can resort to competition through social model in lieu of competition through exchange-rate.

**Chart XIX. RACE TO THE BOTTOM WITHIN THE CONTINENTAL MODEL: BISMARCK’S DEMISE**

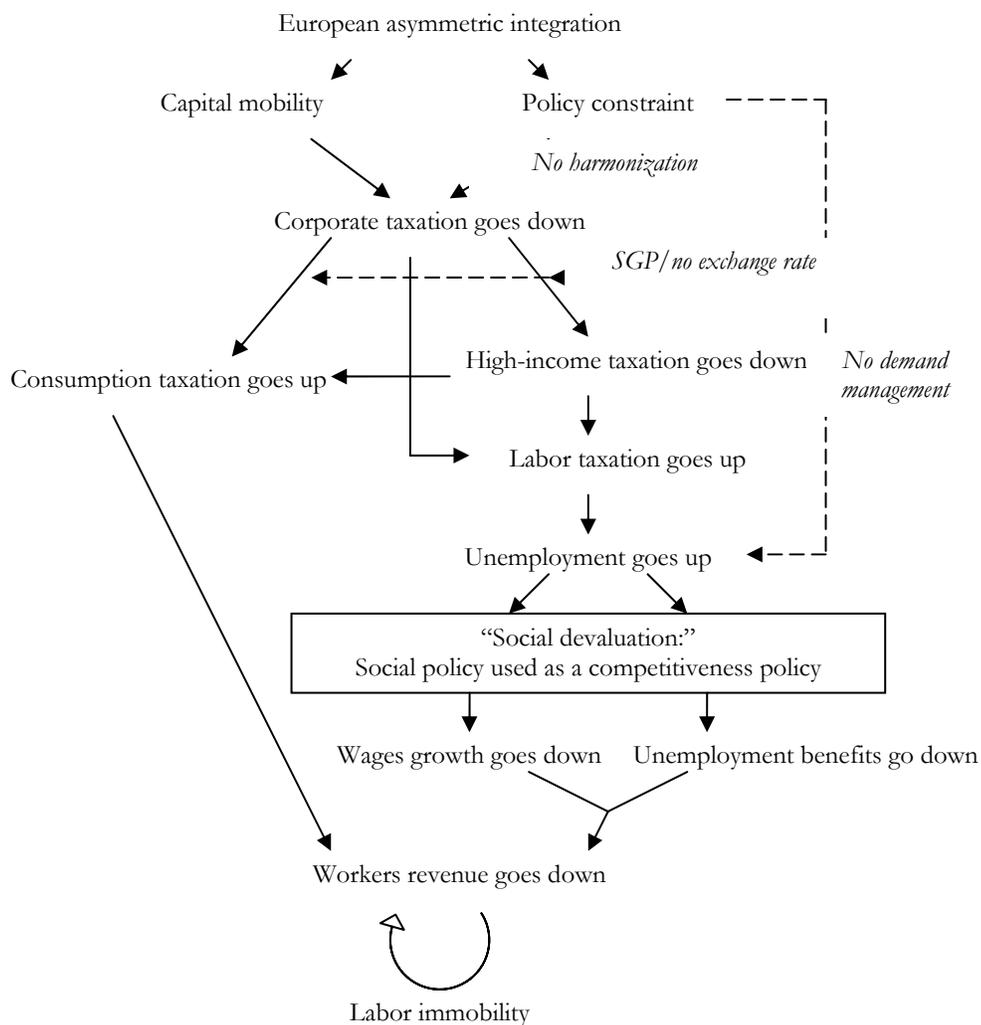
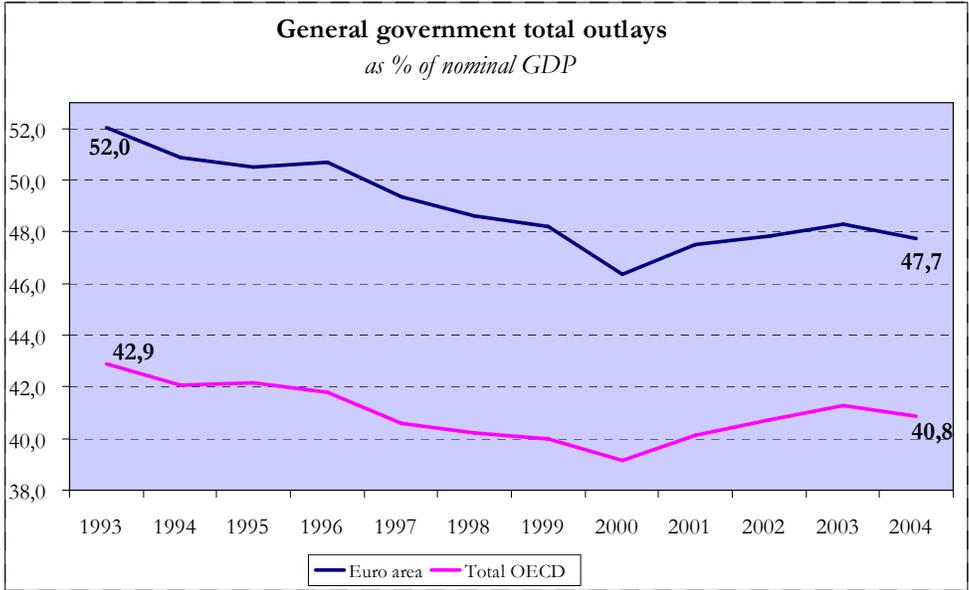
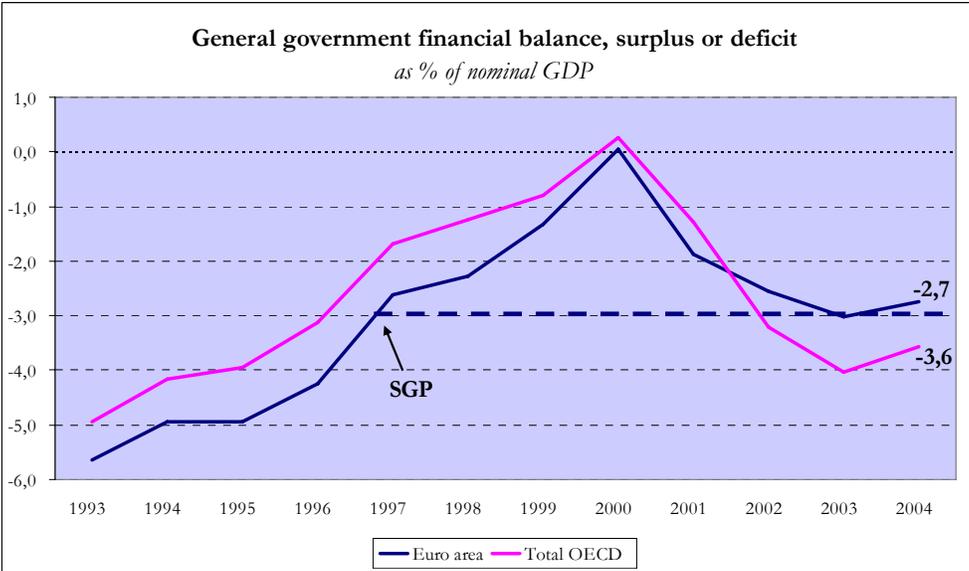


Chart XX shows in this respect that continental economies are not using their macroeconomic policies to counter the pressure of social-tax competition. They have generally abided by the European rules on budgetary policy (more than OECD countries), while monetary and exchange

rate policy have been, because of the nature of the European economic constitution, price-stabilization oriented and not output-stabilization oriented (see Laurent & Le Cacheux 2006).

In addition, large countries compete not only for capital but also for trade, i.e., export shares. The increase in intra-EU trade flows can here also lead to social (and not exchange rate) “disinflation” policies in order to capture closely structured economies’ partners/rivals shares. This competition can lead to wage moderation and unemployment benefits reduction, as is the case between France, Germany and Italy.

**Chart XX. PUBLIC EXPENDITURE IN THE EURO AREA**



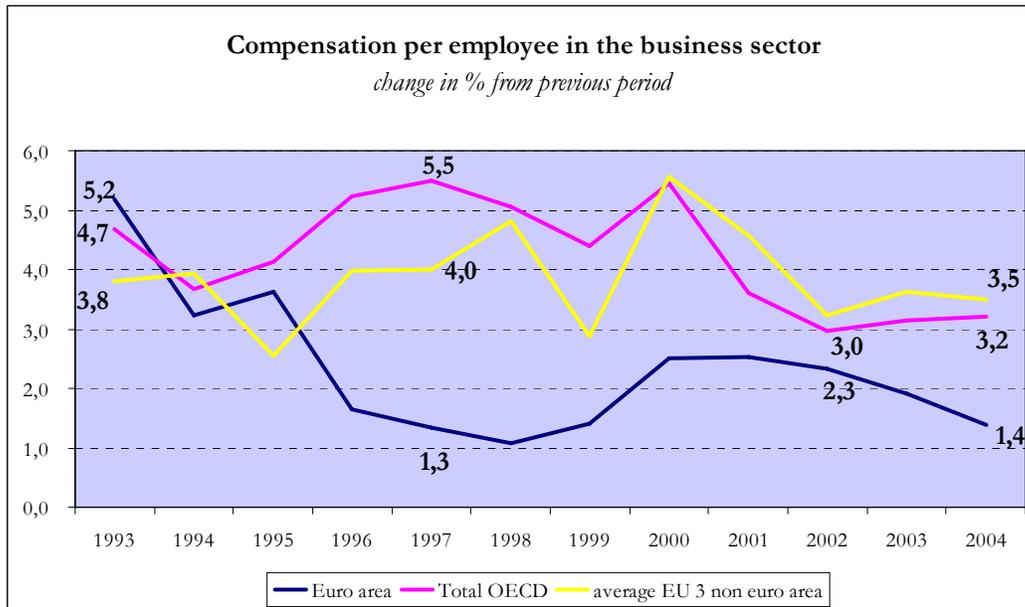
Source: OECD.

Eurostat data show that, even without taking into account the severe reforms implemented between 2002 and 2006, unemployment benefits, in terms of percentage of total social benefits, have been reduced between 1992 and 2002 in large continental economies. During that period,

while unemployment rates increased in Germany (from 5.7 percent to 7.6 percent) and Italy (from 8.8 percent to 9.1 percent) and slightly decreased in France (from 10.4 percent to 9 percent), Germany has witnessed a decrease of unemployment benefits from 9.7 percent to 8.5 percent, France a decrease from 8.9 percent to 7.6 percent and Italy a decrease from 3 percent to 1.7 percent. Controlling for composition effects, the OECD 2006 *Employment Outlook* shows that Germany and France have followed the organization's restrictive policy reform recommendations over the period 1994-2004<sup>20</sup> in terms of duration, and to a lesser degree of replacement rates of unemployment benefits.

The impact on "continental" wages is much more spectacular, as illustrated in Chart XXI where the euro area stands for continental economies. It is shown to display an important and persistent gap throughout the 1990s with the OECD and other EU member states. This gap cannot be explained by a corresponding gap in productivity, not before the very last period. It is thus more likely to be related to the weight of the tax burden put on labor as a consequence of capital mobility.

**Chart XXI. RACE TO THE BOTTOM WITHIN THE CONTINENTAL MODEL: IMPACT ON WAGES**



Source: OECD.

<sup>20</sup>Known as the OECD "Jobs Strategy."



*The race to the bottom within the “Nordic” model*

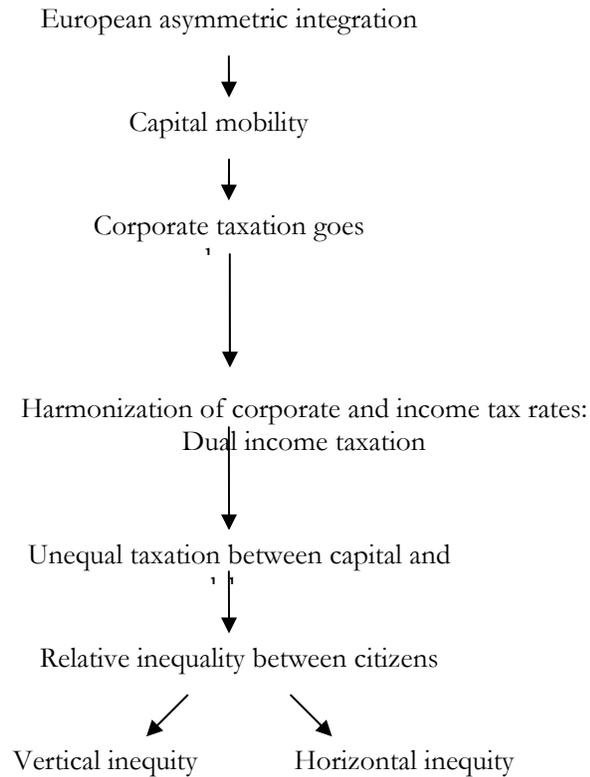
As argued in Ganghof (2006), two strategies of capital taxation are possible for welfare states: “Large welfare states seem to require moderate capital taxation. Moderation can be achieved in two ways: shifting the tax burden onto payroll taxes and indirect consumption taxes (low income taxation) or privileging capital income within the income tax (differentiated income taxation).”

As shown in Chart XXV (*cf. infra*), the “Nordic” countries have by and large opted for the second solution and implemented dual income taxation during the 1990s.<sup>21</sup> The dynamic of the cooperative race to the bottom within the “Nordic” model is shown in Chart XXII.

An important qualification in this respect must be made. “Nordic” countries were not all members of the EU when they decided on this taxation reform (only Denmark was, while Norway still isn’t). Yet, dual income taxation reforms can be seen, as can the “flat tax” in Eastern countries, as a necessary adaptation to the EU market of capital. The fact that all Nordic countries are small played a major role in the implementation of a cooperative tax harmonization (see previous subsection). Since neither of them could resist capital mobility but none of them had to fear retaliation, the process of yardstick cooperation was able to fully play (see Chart XXV). If the result in terms of efficiency of the tax system is impressive, the outcome in terms of income inequalities and redistribution seems more dubious. As shown in Chart XXIII, income inequalities have actually risen significantly in “Nordic” countries (although they exhibit levels of inequalities that are still the lowest in the EU and for that matter in the world) since the second half of the 1990s, while they have remained constant in the EU, whether limited to “continental” countries (more or less the euro area) or taken as a whole.

<sup>21</sup> See Cnossen (2002) for a general presentation and Ganghof (2005b) for the specific case of Denmark.

**Chart XXII. RACE TO THE BOTTOM WITHIN THE NORDIC MODEL: BEVERIDGE' S DEMISE**

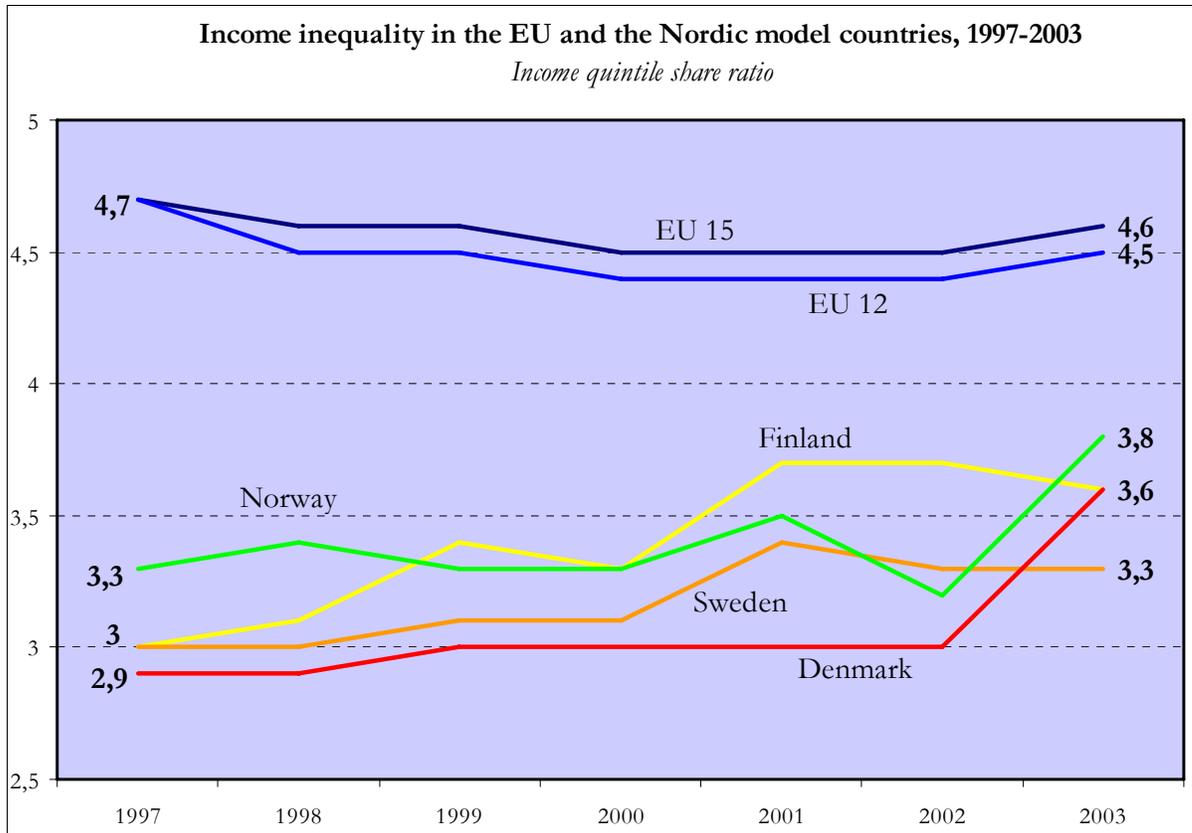


**Chart XXIII. RACE TO THE BOTTOM WITHIN THE NORDIC MODEL:  
IMPACT ON INCOME INEQUALITIES**

Inequality of income distribution (income quintile share ratio)

	1997	1998	1999	2000	2001	2002	2003
EU15	4,7	4,6	4,6	4,5	4,5	4,5	4,6
EU12	4,7	4,5	4,5	4,4	4,4	4,4	4,5
Finland	3	3,1	3,4	3,3	3,7	3,7	3,6
Sweden	3	3	3,1	3,1	3,4	3,3	3,3
Norway	3,3	3,4	3,3	3,3	3,5	3,2	3,8
Denmark	2,9	2,9	3	3	3	3	3,6

*Note:* Income quintile share ratio is the ratio of total income received by the 20 percent of the population with the highest income (top quintile) to that received by the 20 percent of the population with the lowest income (lowest quintile). Income must be understood as equivalized disposable income.



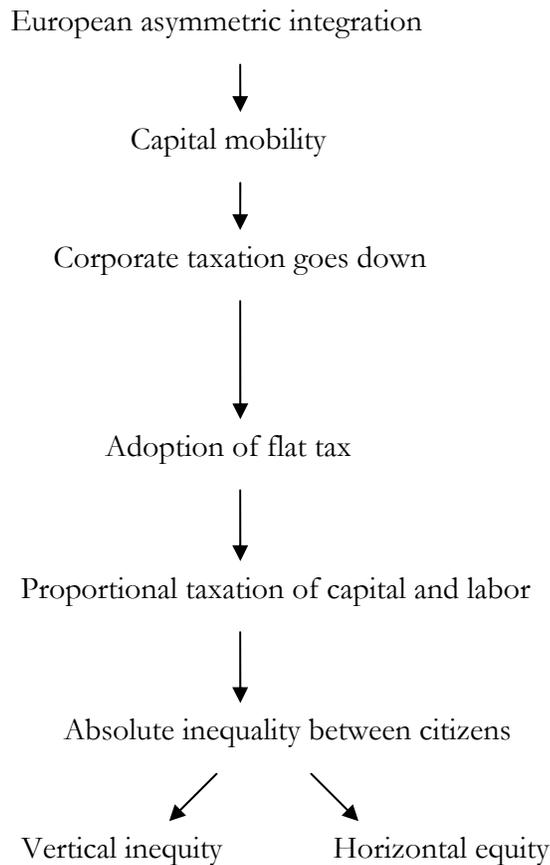
Source: Eurostat.

Brandolini & Smeeding (2006) using not Eurostat data but Luxembourg income study data reach the same conclusion, but only for Sweden and Finland, which in the mid-1990s display a sharp increase in income inequalities and a corresponding sharp decrease in redistribution.

*The race to the bottom within the eastern model*

The economic and social dynamic within the “Eastern” model is obviously of different nature than for “continental” and “Nordic” countries. Yet, capital mobility also exerts a strong pressure on taxation system and the Eastern response to it has been the implementation of “flat tax” (a unique proportional taxation of all income), as represented in Chart XXIV.

**Chart XXIV. RACE TO THE BOTTOM WITHIN THE EASTERN MODEL: LENIN' S DEMISE**



Despite the fact that most Eastern countries are small, the logic of competition seems stronger among them than the logic of cooperation. Not all countries have implemented a “flat tax” and those which haven’t so far are under pressure to do so. Moreover, as shown in Chart XXV, the contrast between Nordic and Eastern countries is striking. While Nordic countries have implemented very similar dual income taxation system (in terms of taxation principle and rates), Eastern countries of the first wave of “flat tax” and even more of the second wave, have competed on the rate of the flat tax.

**Chart XXV. TAXATION WITHIN THE NORDIC AND EASTERN MODEL**

Dual income taxation in within the “Nordic” model

	Year of introduction	Rate of taxation of corporate profits	Rate of taxation on other capital income	Rate of taxation on labor (min/max)
Sweden	1991	28	30	28/56
Norway	1992	28	28	28/47,5
Finland	1993	29	29	30,5/52,5

Source: Cnossen (2002).

Flat tax in the “new” Europe

	Year of introduction	Rate
Estonia	1994	26
Lithuania	1994	33
Latvia	1995	25
Slovakia	2004	19
Romania	2005	16

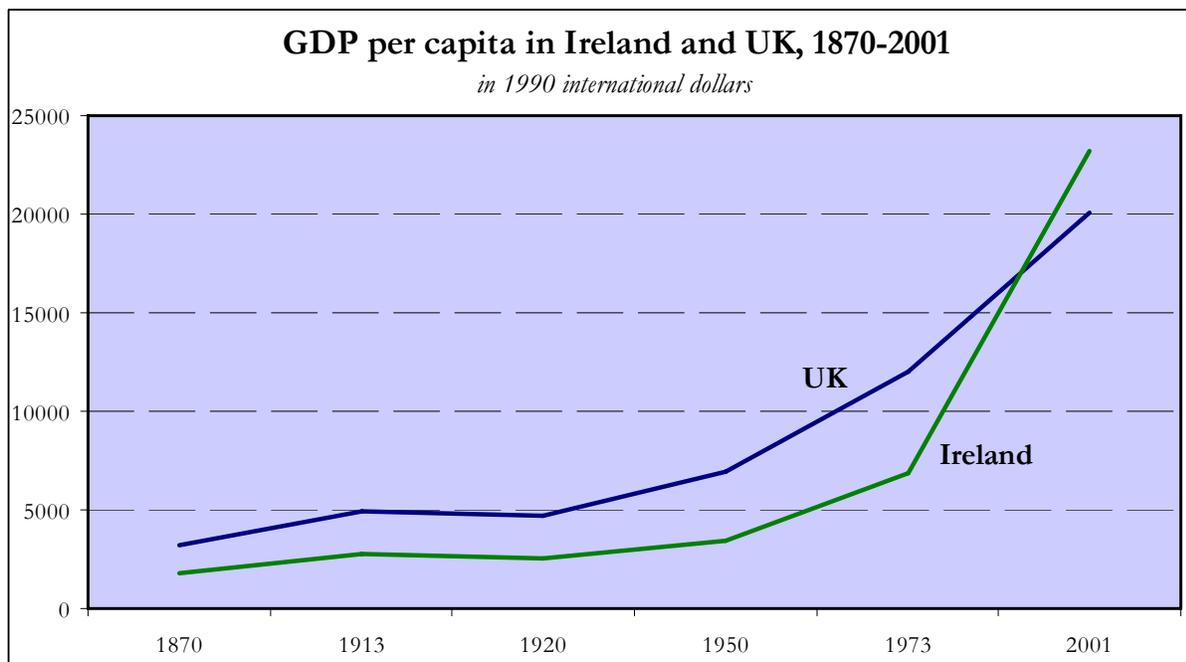
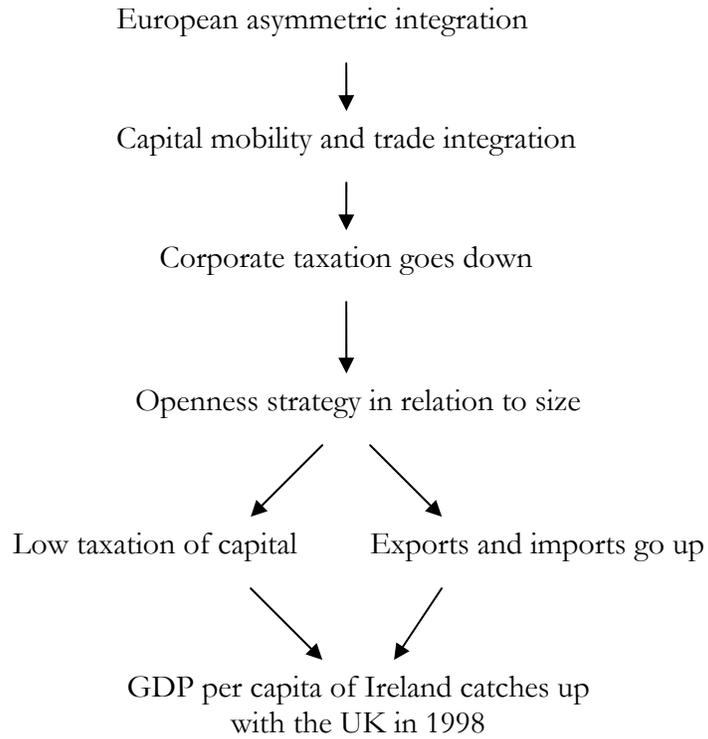
Source: “The case for flat taxes,” *The Economist*, April 14, 2005.

*The race to the top within the liberal model*

One model has so far been left out of the general framework of European “races to bottoms,” the liberal or residual one. The reason is that within the liberal model, the process at play would best be characterized as a race to the top. As shown earlier in Chart XI, Ireland has from the very beginning of the Single Market opted for a “free rider” strategy with respect to corporate taxation. Combined with trade and financial openness and the advantage of country size,<sup>22</sup> Ireland has become the EU success story and stands for one of the most spectacular economic catch-ups of the contemporary period. The dynamic of the “race to the top” within the liberal model and the result in terms of GDP per capita catch-up between Ireland and the U.K. is shown in Chart XXVI.

<sup>22</sup>Again, see Laurent & Le Cacheux, 2006.

**Chart XXVI. RACE TO THE TOP WITHIN THE LIBERAL MODEL: IRELAND AND MILL' S TRIUMPH**



Source: A. Maddison, *The World Economy: Historical Statistics* (Paris: OECD, 2003).

## *Integrity and efficiency*

The general framework, that this paper has tried to substantiate, explaining why the contemporary period of European integration is associated with a demise and not a rise of the welfare state as in the first globalization (Chart XXVII).

It is now possible (and necessary) to present a normative perspective on this state of European affairs. Indeed, since it has been argued that European competition acts as a constitution for member states' redistribution policies, it is legitimate to formulate two criteria for assessing it, integrity and efficiency.<sup>23</sup>

When constitutional provisions are explicitly chosen and written (as for the economic provisions of the European economic constitution), they also entail revision rules. Hence, revisability is a sub-criterion of integrity. When provisions are implicit, as is the case with the kind of informal rules this paper is concerned with, integrity simply means neutrality. Neutrality can be defined as the preservation of the social justice and redistribution principles embedded in national systems, as they are validated through regular elections by citizens. This criterion is not met as far as "Shadow Social Europe" is concerned.

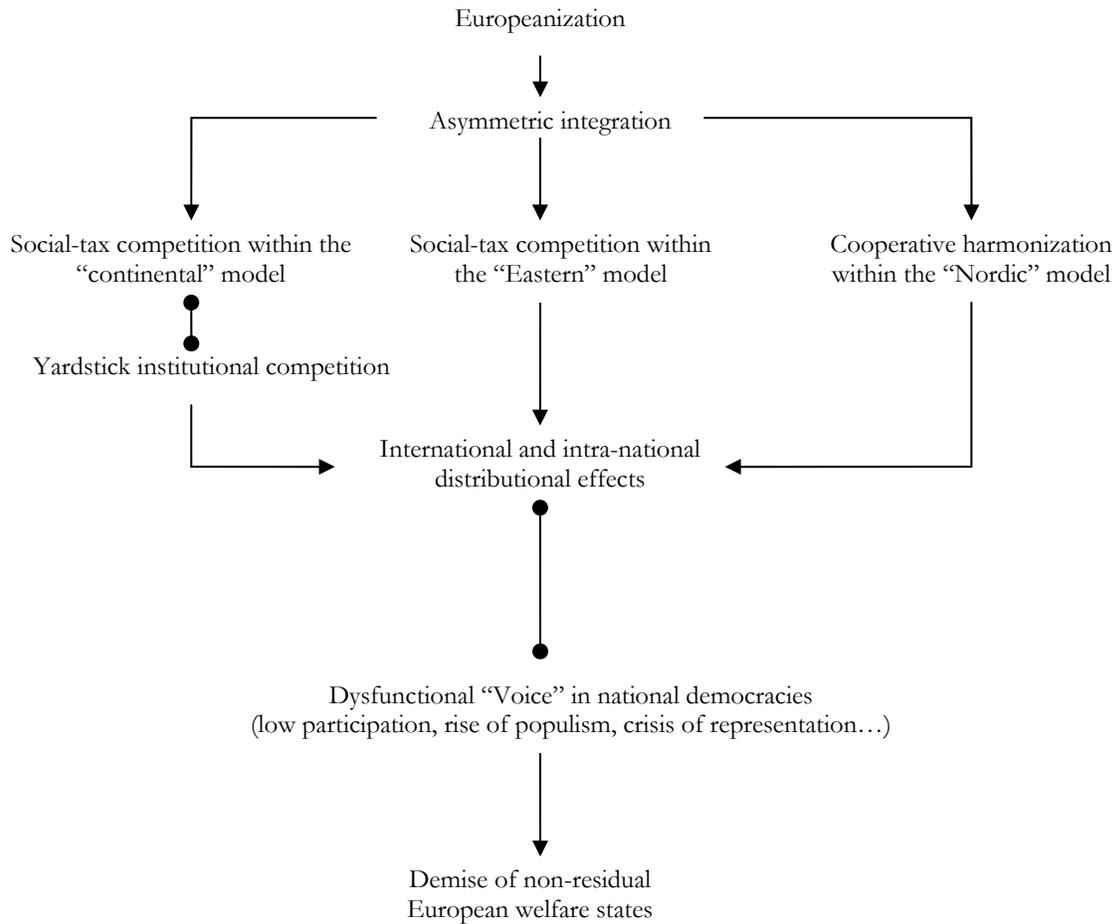
In terms of efficiency,<sup>24</sup> it is impossible to decide *a priori* if tax competition is beneficial or harmful. It depends on a number of factors, among which consumers' mobility is the most important (see Brueckner, 2004). If this criterion is not met, i.e., if consumers/workers are trapped in a system where their labor is heavily taxed to finance social policies, then the good side of competition ("à la Tiebout") is much more difficult to find. In the case of social-tax competition as we have defined it, the efficiency criterion is also clearly not satisfied within the continental economies given the consequence in terms of tax burden put on labor, wage and social benefits moderation. However, as shown by the case of Ireland, the degree to which social-tax competition is inefficient depends on country size. Nordic and Eastern countries are certainly heading in a wrong direction given the objective of their social-tax competition, but not in terms of growth or unemployment.

---

<sup>23</sup>For a definition and discussion of those criteria, see Laurent & Le Cacheux (2006).

<sup>24</sup>In the tax competition literature, efficiency has a very precise meaning. A tax system is deemed efficient if it does not distort, i.e., is neutral to, investment decisions. I refer to a much broader definition of rules efficiency, namely upward convergence in welfare, see Laurent and Le Cacheux (2006).

**Chart XXVII. EUROPEAN RACES TO BOTTOMS: A SCENARIO**



In terms of efficiency,<sup>25</sup> it is impossible to decide *a priori* if tax competition is beneficial or harmful. It depends on a number of factors, among which consumers' mobility is the most important (see Brueckner, 2004). If this criterion is not met, i.e., if consumers/workers are trapped in a system where their labor is heavily taxed to finance social policies, then the good side of competition ("à la Tiebout") is much more difficult to find. In the case of social-tax competition as we have defined it, the efficiency criterion is also clearly not satisfied within the continental economies given the consequence in terms of tax burden put on labor, wage and social benefits moderation. However, as shown by the case of Ireland, the degree to which social-tax competition is inefficient depends on country size. Nordic and Eastern countries are certainly heading in a wrong direction given the objective of their social-tax competition, but not in terms of growth or unemployment.

<sup>25</sup>In the tax competition literature, efficiency has a very precise meaning. A tax system is deemed efficient if it does not distort, i.e., is neutral to, investment decisions. I refer to a much broader definition of rules efficiency, namely upward convergence in welfare, see Laurent and Le Cacheux (2006).

## VI. The future of European inequalities and public policy dilemmas

If one follows Piketty & Saez (2006), the future of European inequalities looks bright. The authors show that the reduction of inequality in the postwar period was essentially the product of the “accident” of world wars on capital revenues and of the prolongation of this accident’s consequence through welfare programs and progressive tax systems (especially estate taxation). In a world where skilled labor but mostly capital are more mobile than ever and manage to alter welfare states’ objectives, inequalities (now more driven in difference in wages than in capital revenues) are bound to rise sharply. The policy issue at the European level is thus crucial.

In this respect, given the depth of European integration and the superficiality of European governance, it could be argued that the EU at the present moment is a constitution without a sovereign. How to restore some efficiency and integrity into the social provisions of the European economic constitution?

The first solution would be to lower capital mobility and/or to raise labor mobility. For reasons too numerous to list, both solutions are unlikely, so that an indirect public policy might appear more efficient.

Tax harmonization and coordination in the EU is a complex and well documented issue (see Cnossen, 2003 for an overview). One (apparent) paradox has been the fact that harmonization has made progress where it was less needed (e.g. the VAT). Another paradox is that the project under consideration in the EU as these lines are written, the “Common Consolidated Corporate Tax Base” (CCCTB), could actually end up fostering tax competition even more rather than reducing the incentive for it.

The literature on tax competition generally recognizes that most of the inefficiencies that emerge due to the immobility of labor and mobility of capital can be offset by two means (see Brueckner, 2004). One is to agree to levy a *common* tax on capital (because then the choice of location for capital becomes indifferent). The other is to agree to finance *in common* public policies (because then the local under-provision of public goods becomes impossible).

The EU thus faces essentially three policy choices if it is to counter the damaging effects of social-tax competition. The first is to create a common tax on capital (see Le Cacheux et al., 1998). The second is to start a deliberation on “European public goods” in order to create a budget for common policies (see Laurent & Le Cacheux, 2005). Finally, euro area countries should create a macroeconomic cooperative framework (first advocated in Fitoussi, 1995) in order to reduce the incentive for “social devaluation” within the “continental” model.

## VII. Epilogue: invisible races to bottoms

*Alice looked round her in great surprise. 'Why, I do believe we've been under this tree the whole time! Everything's just as it was!'*

*'Of course it is,' said the Queen, 'what would you have it?'*

*'Well, in OUR country,' said Alice, still panting a little, 'you'd generally get to somewhere else - if you ran very fast for a long time, as we've been doing.'*

*'A slow sort of country!'* said the Queen. *'Now, HERE, you see, it takes all the running YOU can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!'*

Lewis Carroll, *Through the Looking-Glass* (1871), Chapter II.

European welfare states are presently in Alice's uncomfortable situation. While they try to contain the impact on social policies of the asymmetric and damaging integration process they put in motion, new social risks appear and develop. Hacker (2004) makes a similar point for the U.S..

Alber & Standing (2000) note in this respect that "the distinction between erosion and arrested development corresponds to one between *non-decisions* (by which governments abstain from introducing or expanding protective legislation) and *decisions* (by which they dismantle schemes)."

The literature on the rise of new social risks<sup>26</sup> (associated with youth, women, poverty, the new service economy...) points precisely to the idea that erosion and arrested development go hand in hand in the embattled European welfare state.

---

<sup>26</sup>See Taylor-Gooby (2004).

## References

- Alber, J. & Standing, G. 2000. "Social dumping, catch-up, or convergence? Europe in a comparative global context," *Journal of European Social Policy* 10: 99-119.
- Apolte, T. 2001. "How tame will Leviathan become in institutional competition?" *Public Choice* 107: 359-381.
- Atkinson, T. 2002. "European Welfare States and Global Competition," paper presented at the conference "From Europeanization of the Globe to the Globalization of Europe," Graduate Institute of International Studies, Geneva, January 10-12, 2002.
- Atkinson, T. 2004. "The Future of Social Protection in a Unifying Europe," 1<sup>st</sup> Kela Lecture, Helsinki, November 5, 2004, accessed at [http://www.nuff.ox.ac.uk/users/atkinson/KELA%202004%20revised.htm#\\_ftnref1](http://www.nuff.ox.ac.uk/users/atkinson/KELA%202004%20revised.htm#_ftnref1)
- Berger, S. 2003. *Notre Première Mondialisation-Leçons d'un Echec Oublié*. Paris: Seuil.
- Bosco, A. 2000. "Towards a rethinking of the national systems of social protections? Observations on the recent jurisprudence of the Court of Justice," *Notre Europe*, accessed at [http://www.notre-europe.asso.fr/article.php3?id\\_article=264](http://www.notre-europe.asso.fr/article.php3?id_article=264)
- Brandolini A. & Smeeding T. M. 2006. "Patterns of Economic Inequality in Western Democracies: Some Facts on Levels and Trends," *PS: Political Science & Politics* 39: 21-26.
- Brennan, G. & Buchanan, J. M. 1980. *The Power to Tax: Analytical Foundations of a Fiscal Constitution*. Cambridge: Cambridge University Press.
- Brueckner, J. K. 2000. "Welfare Reform and The Race to the Bottom: Theory and Evidence," *Southern Economic Journal* 66: 505-525.
- Bucovetsky, S. 1991. "Asymmetric tax competition," *Journal of Urban Economics* 30: 167- 181.
- Cameron, D. R. 1978. "The Expansion of the Public Economy," *American Political Science Review* 72: 1243-1261.
- Cnossen, S. 2002. "Tax Policy in the European Union—A Review of Issues and Options," *CESifo Working Paper Series* No. 758.
- Cnossen, S. 2003. "How Much Tax Coordination in the European Union?" in Lans Bovenberg, Sijbren Cnossen and Ruud de Mooij (guest editors), "Tax Coordination in the European Union," *International Tax and Public Finance* 10,6: 625-649.
- Creel, J., Laurent, É., Le Cacheux, J. 2005. "Delegation in Inconsistency: The 'Lisbon strategy' Record as an Institutional Failure," *OFCE Working Paper* n° 2005-07, June, available at <http://www.ofce.sciences-po.fr/>.
- Cremer, H. & Pestieau, P. 2003, "Social Insurance Competition between Bismarck and Beveridge," *Journal of Urban Economics* 54: 181-196.
- Cremer, H. & Pestieau, P. 2004. "Factor Mobility and Redistribution," in V. Henderson and J. Thisse (eds.), *Handbook of Regional and Urban Economics*, vol. 4, North Holland: Amsterdam.
- Esping-Andersen, G. 1996. *Welfare States in Transition*. London: Sage.
- European Commission. 1996. "Taxation in the European Union," Sec (96) 487 final, Brussels.
- European Commission. 1997. "Towards tax co-ordination in the European Union," Com (97) 495 final, Brussels.
- Fitoussi, J-P. 1995. *Le débat interdit : monnaie, Europe, pauvreté*. Paris : Arléa.
- Fitoussi, J-P. (ed.). 1999. *Rapport sur l'état de l'Union européenne 1999*. Paris : Fayard/Presses de Sciences-Po.
- Fitoussi, J-P. 2002a. *La règle et le choix*. Paris : Seuil.

- Fitoussi, J-P. & Leijonhufvud, A. 2002. "Préface," in J. M. Keynes, *La pauvreté dans l'abondance*, Paris : Gallimard.
- Fligstein, N. & Merand, F. 2002. "Globalization or Europeanization? Evidence on the European Economy Since 1980," *Acta Sociologica* 45: 7-22.
- Ganghof S., 2005a. "Globalization, Tax Reform Ideals and Social Policy Financing," *Global Social Policy* 5: 77-95.
- Ganghof S., 2005b. "High Taxes in Hard Times: How Denmark Built and Maintained a Huge Income Tax," *MPIfG Working Paper* 05/5, Max Planck Institute for the Study of Societies, Cologne.
- Ganghof S. 2006. "The Politics of Tax Structure," *MPIfG Working Paper* 06/1, January, Max Planck Institute for the Study of Societies, Cologne.
- Genschel, P. 2002. "Globalization, Tax Competition, and the Welfare State," *Politics & Society* 30: 245-275.
- Genschel, P. 2004. "Globalization and the welfare state: a retrospective," *Journal of European Public Policy* 11,4 (August): 613-636.
- Genschel, P. 2005. "Globalization and the transformation of the tax state," *European Review* 13: 53-71.
- Hacker, J. S. 2004. "Privatizing Risk without Privatizing the Welfare State: The Hidden Politics of Social Policy Retrenchment in the United States," *American Political Science Review* 98: 243-260.
- Kanbur, R. & Keen, M. 1993. "Jeux sans frontières: Tax Competition and Tax Coordination When Countries Differ in Size," *American Economic Review* 29: 81-5.
- Kok, W. 2004. "Facing the Challenge—The Lisbon strategy for growth and employment," Report from the High Level Group, European Commission, Brussels.
- KPMG, 2006, *KPMG's Corporate Tax Rate Survey 2006*, London, April, accessed at <http://www.kpmg.com/services/ctr.asp>.
- Krogstrup, S. 2003. "Are Capital Taxes Racing to the Bottom in the European Union?" *HEI Working Paper* No: 01/2003, Geneva.
- Laurent, É. 2005a. "La croissance du progrès social," *Revue de l'OFCE* 93: 357-366.
- Laurent, É. 2005b. "From Tax Competition to Social Race to the Bottom: European Models and the Challenge of Mobility," in Fitoussi, J-P. and Padoa Schioppa, F. K. (eds.), *Report on the State of the European Union, Vol. 1*. London: Palgrave Macmillan.
- Laurent, É. & Le Cacheux, J. 2006. "Integrity and Efficiency in the EU: The Case Against the European Economic Constitution," *Center for European Studies Working Paper Series* n° 130, Harvard University.
- Le Cacheux, J. et al. 1998. "Etude sur la concurrence fiscale en Europe," in Marini (Rapp.) *La concurrence fiscale en Europe : une contribution au débat, Les Rapport du Sénat* n° 483, Paris.
- Le Cacheux, J. 2000. "Les dangers de la concurrence fiscale et sociale en Europe," in "Questions européennes." *Rapports du Conseil d'analyse économique* n° 27. Paris : La Documentation française.
- Le Cacheux, J. & Saint-Etienne, C. 2005, "Croissance équitable et concurrence fiscale," *Rapports du Conseil d'analyse économique* n° 48. Paris : La Documentation française.
- Lindert P. H. 1994. "The Rise of Social Spending," *Explorations in Economic History* 31: 1-37.
- Lindert P. H. 2004, *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century, Volume I: The Story*. New York: Cambridge University Press.
- Martin, A. & Ross, G. (eds.) 2004. *Euros and Europeans: Monetary Integration and the European Social Model*. New York: Cambridge University Press.

- Mill, John Stuart, 1848, *Principles of Political Economy*, London: Longmans, accessed at <http://www.econlib.org/library/Mill>
- North, D. 1994 "Economic Performance Through Time," *American Economic Review* 84: 359-68.
- Oates, W. E. 1999. "An Essay on Fiscal Federalism," *Journal of Economic Literature* 37: 1120-1149.
- O'Rourke, K. & Williamson, J. G. 1999. *Globalization and History*. Cambridge MA: MIT Press.
- Pierson, P. 1996. "The New Politics of Welfare," *World Politics* 48 (2): 143-79.
- Pierson, P. 1998. "Irresistible forces, immovable objects: post-industrial welfare states confront permanent austerity," *Journal of European Social Policy* 4: 539-60.
- Pierson, P. 2001. "Coping with Permanent Austerity: Welfare State Restructuring in Affluent Democracies," in Pierson, P. (ed.), *The New Politics of the Welfare State*, Oxford University Press: Oxford, pp. 410-456.
- Piketty, T. & Saez, E. 2006. "The Evolution of Top Incomes: A Historical and International Perspective," *NBER Working Paper* No. 11955, January.
- Quintin, O. & Favarel-Dapas, B. 1999. *L'Europe sociale : enjeux et réalités*. Paris : La Documentation française.
- Ramsey, F. P. 1927. "A Contribution to the Theory of Taxation," *Economic Journal* 37: 47-61.
- Scharpf, F. 2002. "The European Social Model. Coping with the Challenges of Diversity," *Journal of Common Market Studies* 40: 645-670.
- Schumpeter, J. A. 1942, *Capitalism, Socialism & Democracy*, new edition. New York: Harper Perennial, 1975.
- Salmon P. 2005. "Horizontal Competition Among Governments," *LEG - Document de travail - Economie* 2005-02, Université de Bourgogne.
- Sapir A. et al. 2004. *An Agenda for a Growing Europe: The Sapir Report*, Oxford: Oxford University Press.
- Sinn, H-W. 2003. *The New Systems Competition*. Oxford: Basil Blackwell.
- Tanzi, V. 2006. "Making Social Policy under Efficiency Pressures from Globalization," in Inge Kaul and Pedro Conceição, *The New Public Finance-Responding to Global Challenges*. Oxford: Oxford University Press.
- Taylor-Gooby, P. (ed.) 2004. *New Risks, New Welfare: The Transformation of the European Welfare State*. Oxford: Oxford University Press.
- Tiebout, C. M. 1956. "A Pure Theory of Local Expenditure," *Journal of Political Economy* 64: 416-424.
- Wildasin D. E. 2005. "Global Competition for Mobile Resources: Implications for Equity, Efficiency, and Political Economy," *IFIR Working Paper* No. 2005-08, November.
- Williamson, J. G. 2002. "Winners and Losers Over Two Centuries of Globalization," *NBER Working Paper* n° 9161, Cambridge MA.
- Wilson, J. D. 1999. "Theories of Tax Competition," *National Tax Journal* 52: 269-304.
- Wilson, J. 1991. "Tax competition with interregional differences in factor endowments," *Regional Science and Urban Economics* 21: 423-451.
- Winner, H. 2005. "Has Tax Competition Emerged in OECD Countries? Evidence from Panel Data," *International Tax and Public Finance* 12: 667-687.
- Zodrow G. R., 2003, "Tax Competition and Tax Coordination in the European Union," *International Tax and Public Finance* 10: 651-671.