Chapter 1

Competition among States

in

THE NEW SYSTEMS COMPETITION

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Chapter 1

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The New Systems Competition[1]

In a broad sense, the competition between systems has ended. The enormous economic power of the capitalist market economy forced communism to its knees: the discredited central planning system has left the stage of world history.

In a more narrow sense, the competition between systems is just beginning. Not all market economies are the same. Today many different varieties can be found all over the globe: market economies with planning elements as in France, quasi-night watchmen systems as in the USA, liberal corporate systems as in Japan, competitive socialist systems as in China, and social market economies as in Germany and the Scandinavian countries. Only time will tell which of these different systems will survive and how the remaining systems will evolve.

The old systems competition between communism and capitalism was aimed at gaining economic, cultural and, most importantly, military dominance, and took the form of mutual observation, imitation and innovation while the borders were closed. In the new systems competition, the goal of military dominance has lost importance, and a new element has been added to the competitive process that fundamentally changes its nature. This element is the international migration of people and capital as a reaction to national policy decisions. The migration response of production factors makes states behave like firms which compete for customers

[1] A variant of this section has appeared as Sinn (2001).

by offering them attractive combinations of tax prices and public goods. In the old systems competition, relocation decisions were excluded by the Iron Curtain and other means of tightening the national borders. In the new systems competition, location decisions will be the central driving force for national policy reforms. The factors of production are complements and cannot operate without one another. Whoever controls the political process in a country will have to make sure that not only the factors he owns are treated well by the state but also those factors that are mobile internationally and whose escape would have adverse repercussions for the domestic economy as a whole.

The difference between the old and the new systems competition can be clarified by alluding to Albert Hirschman's (1970) theory of institutions which emerged from his personal experience as a socialist youth leader who managed to escape the Nazi regime. Hirschman argued that people have three options to cope with unattractive institutions or states: 'exit, voice and loyalty'. Voice and loyalty were the forces that were characteristic in the old competitive process. Exit is the special feature added in the new form of systems competition. If exit had been easier at the time when Hirschman fled, many more people would have left Germany, and history might have taken a different course.

Today, there is a widespread fear in social welfare states that private companies will use the exit option. While goods and financial capital have been moving freely across borders for some time, real capital is now following. More and more firms are transferring their operations to countries with low wages and taxes to hold their own in the increasingly intensive international product and cost competition. The more liberal the trade relations and the lower the relative transportation costs, the easier the relocation becomes, for it is no longer necessary to choose a production site in the neighbourhood of marketplaces. Cross-border mergers contribute to reducing the cost of relocation decisions. Once a multinational company is established, it can easily

shift capital and tax bases between the countries where it operates. The New Economy, too, will facilitate relocation decisions. Virtual firms that employ people in different parts of the world and connect them via the Internet can be moved to low-tax countries without moving matter and without incurring any particular relocation cost. The Organization for Economic Cooperation and Development published an extensive policy report under the title *Harmful Tax Competition. An Emerging Global Issue* (OECD, 1998) in which they spelled out a large number of legal and economic problems resulting from the increased mobility of international capital. The issue has, indeed, become more pressing in recent years and needs both analysis and policy actions.

By comparison, labour markets are far from perfect, since many people are reluctant to cross cultural borders and ignorant about living conditions in other countries. However, things are changing even here. More and more people from all income categories are starting to move, looking for better living conditions elsewhere in the world. There is a host of top managers who are willing to work abroad or are expected to do so by the multinational corporations that employ them, guest worker flows are normal phenomena in the European Union and elsewhere in the world, and many retired people decide to spend their pensions in low-cost countries. In terms of languages spoken, some Mediterranean islands are undergoing changes in their national identities, and construction sites in northern Europe have become veritable Towers of Babel.

One special aspect of globalization is the migration of poor people from the less developed economies to the more developed ones. The time when lack of knowledge and transport costs hindered such migration is long since past. Global television coverage and increasing hordes of tourists are spreading the news about the prosperity of the Western industrial countries even to the most distant Himalayan villages, and the prices that the illegal transport organizations charge for transferring people from the Third World to the First World are falling fast because controls have weakened and air traffic has become cheaper. Ships full of Kurdish refugees land on Italian

coasts, planes with Tamil asylum seekers land at German airports, and desperate refugees from the former Soviet Union risk their lives by swimming across the Oder at night to enter Germany undetected.

As will be explained below, the migration flows will probably increase multifold when eastern Europe joins the EU for then the right of residence will be granted to those who wish to work abroad. Extensive migration can be expected in Europe as the pressure built up over decades of communist dictatorship is suddenly released.

The increasing mobility of people, goods and factors of production will put the countries of the world under severe competitive pressure. Competition is no longer over advancing a largely self-sufficient economy to a position of economic strength, social peace or military superiority by means of clever internal policy measures. The strategies of Bismarck, Stalin or Reagan are no longer in demand. The leaders of every country must now consider what influence their national institutions can exercise on the cross-border transfer of economic activities. Taxes, expenditures, social transfers, public goods, regulation systems, legal systems and many other things affect the location decisions of people and production factors just as much as do wages and other economic factors which are not directly influenced by the government. No government can permit mobile capital to be driven away because of the unusual design of its institutions any more than they can permit its institutions to attract the world's poor. Like a private firm, a government competes for good customers and must try to ward off the poor.

In the late 1960s the city of New York implemented a very generous social assistance programme to help its poor and check the negative social implications of poverty. It soon became clear that the programme could not be maintained since it attracted the poor from all over the United States and imposed a huge burden on the municipal budget. The programme had to be

limited to prevent the city from going bankrupt.[2] The city government had to learn the hard way that it could not act against the forces of systems competition.

The effects of systems competition are not always so readily evident, however. Often the migration responses are so slow that a long period of time can elapse before a country is forced to react to a policy move of another country. In 1982 the Wassenaar agreement on wage moderation was made in the Netherlands, and in 1986 the United States enacted its policy of tax cut cum base broadening. It took Germany more than 15 years and a number of spectacular relocation decisions to understand what had happened and to consider copying these reforms. In the light of these observations, the reader should be warned not to interpret the theoretical results of this book from the angle of day-to-day politics. It may take many decades before the forces analysed here become visible.

The long time span is a potential problem from an international policy perspective, for if there is something wrong with systems competition, if it does not work in the same way as private markets do, then it will be difficult to implement timely corrective measures such as mutual international agreements on political conduct or the development of international political structures and institutions. The sluggish reactions of national policies could make a trial and error process in the development of international institutions extremely costly. When unpleasant implications of systems competition become visible, it may be too late for countervailing policy meas-

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[2] In John Lindsay's first term as Mayor of New York City (after 1965), social welfare spending grew from 12.5% to 23% of total city expenditures (Glaeser and Kahn, 1999, p. 124). The increased spending went primarily to low-income groups, mostly black and Puerto Ricans; eligibility was lowered and benefits were increased (Shefter, 1985, p. 86). The city became very attractive for this segment of the population, which migrated to New York from all over the United States.

Since the tax base eroded (also as a result of the economic downturn between 1973 and 1975), and since insufficient effort was made to get permission from the state and federal levels to raise taxes, the city's debt increased rapidly, and in 1975 the banks refused to include city securities in their portfolios. As a result, the city had to implement drastic spending cuts to regain its credit standing.

ures. Therefore, theoretical studies are indispensable. They give an early warning of some problems, alert politicians and help them take precautionary actions.

The Selection Principle

Many economists place much faith and hope in the forces set in motion by systems competition. They praise this type of competition as a disciplinary device that will shape a better Europe. Some of them, mostly in the tradition of Hayek and Schumpeter, argue that competition per se is a good thing because it is an 'exploration and invention device' and brings about 'creative destruction'. Others refer to Adam Smith's Invisible Hand and the Main Theorem of Welfare Economics that establishes the Pareto efficiency of competitive equilibria under certain conditions. Still others simply overlook the potential fallacy of aggregation, confusing national with international optimization constraints.

It is undoubtedly true that the word competition rings positively in the economist's ear. However, this does not decide the matter, since the rules of the game under which systems competition takes place are very different from those under which a market economy functions. Where are the well-defined property rights and where is the price vector that makes the plans of different agents compatible and clears the markets? There may be analogies, but to work them out is anything but a trivial exercise. Even market economies will not, in general, be Pareto efficient when there are increasing returns to scale, external effects, information asymmetries or other violations of the assumptions underlying the Main Theorem of Welfare Economics. How can it be taken as self-evident that systems competition would not suffer from such problems? Approaching the problem of systems competition with semantic intellectual exercises leads nowhere. Migration competition has its own adaptive mechanisms which need specific analysis.

Models of systems competition with assumptions tuned to efficient competition between states can now be found in the literature. These models go far beyond the semantic exercises of the Hayekian economists, because they define the exact conditions under which the Invisible Hand would work in systems competition.[3] This is without doubt an intellectually attractive venture, but whether the models really depict the essentials of systems competition is debatable.

The reason for the doubts is to be found in what I have called the *Selection Principle.*[4] The Selection Principle says that governments have taken over all those activities which the private market has proved to be unable to carry out. Because the state is a stopgap which fills the empty market niches and corrects the failures of existing markets, it cannot be expected that the reintroduction of the market by the back door of systems competition will lead to a reasonable allocation result. Instead, it must be feared that the failures that originally caused the government to take action will show up again at the higher level of government competition.

There are a number of examples of the kind of fears that the Selection Principle gives rise to, and this book studies some of them. If the state has taken over the production of goods with increasing returns to scale because private markets tend to result in ruinous competition, must not ruinous competition between states be feared? If the state has stepped in as an insurer where private insurance markets have not been established because of adverse selection processes, will there not be an adverse selection between insurer states, too? If the state regulates the product quality of private firms or makes regulations about bank solvency because it wants to prevent lemon markets from appearing, will there not be a lemon market between the states in which the states neglect their regulatory responsibilities? And finally, if the state imposes competition laws

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[3] Optimistic views of fiscal competition are held, e.g., by Richter (1994, pp. 223-430), Wellisch (1995) or Oates and Schwab (1988, pp. 333-54). For a thorough overview and useful extensions of the existing literature see Wellisch (1999).

[4] See Sinn (1997a, 1997b); for initial thoughts in this direction, see also Sinn, S. (1992).

to hinder private monopolies, should we not expect competitive states themselves to have an interest in fostering cartelization in their national economies? An attempt will be made in this book to give a deeper and more precise meaning to the doubts expressed by the questions.

If the Selection Principle holds, then one can be optimistic about the working of the market economy because the market handles those allocation problems which it can handle. Almost by definition the market economy would perform quite well. On the other hand, it follows from the same argument that we have to be pessimistic about a 'marketplace' in which governments compete, because governments are coping with the rejects of the competitive process. Nothing could be more misleading than the usual conclusion by analogy from private competition to systems competition.

The historical selection of government tasks may also have come about partly by means of a competitive process. However, as explained above, this was not a systems competition forced by factor migration, but a process driven by the attempt to gain economic, cultural and military dominance. Such competition follows quite different laws from those which apply to migrationinduced competition. Given the Selection Principle, it seems possible that the latter may destroy the results of the former.

The Selection Principle is in agreement with the rules and legal aspects of the development of the state as investigated in the traditional school of public finance as represented by Schäffle (1880), Sax (1887), Wagner (1876), Wicksell (1901), Lindahl (1939), Musgrave (1959) or Timm (1961), to mention only a few of the important figures. According to this school, the modern state necessarily accompanies the industrialization and urbanization which occurred as a result of the Industrial Revolution. It came into being primarily to remedy the intolerable state of affairs which characterized the end of the nineteenth century. The suffocating cities, the wretched living conditions of the proletariat, the poverty of the old, the catastrophic hygienic situations, and many

other outrages resulted in a general need for government intervention in the market process which gradually, after various institutional and political impediments had been overcome, led to growing government participation. It was pressure of massive social problems that forced Bismarck to introduce his path-breaking reforms, and it was the power of the democratic majority vote that determined the further development of the modern state into a service provider for its citizens. Despite all its weaknesses and problems, the state must be seen as an instrument for meeting the collective responsibilities which the private market cannot fulfil. It is not a result of an error of history, it is history's logical consequence.

Inefficient Governments and Systems Competition

Although the useful role of governments in the development of modern societies seems obvious, the modern state admittedly suffers from severe deficiencies in its internal decision-making process, as was explained by Buchanan and Tullock (1962), Olson (1965) and other members of the public choice school.[5] In a distributional political struggle between small and large groups, the small groups are always stronger than the large groups because in small groups the value per capita is higher and it is easier for its members to overcome the internal free rider problem in starting a political action. Governments and parliaments therefore tend to concentrate on legal reforms which make gifts to the few and charge the many, and these tend to be tax financed expenditures that favour rent seeking subgroups of the society. The maximization of national welfare is often incompatible with these reforms.

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[5] The public choice school founded by James Buchanan and Gordon Tullock has a pessimistic view of government. Buchanan, the 'libertarian socialist' and dyed-in-the-wool Southerner has a deep-seated aversion to the state. The family trauma of the lost Civil War and the self-sufficient life on the farm where he grew up made him see in the central government a presumptuous authority whose power needs to be restricted (see Buchanan and Musgrave 1999).

There is some hope that systems competition will reduce this type of internal inefficiency because mobile factors of production will prefer the less inefficient states and force the governments to choose their policies in line with the national interest rather than the wants of special interest groups.[6] This hope follows the same logic as the view that private competition eliminates inefficient companies or forces them to act efficiently. Indeed, much can be said for this logic under ideal market conditions. Inefficiently managed firms have high average costs and are forced to match the lower costs of efficiently managed firms to stay in business. The Main Theorems of Welfare Economics probably also apply, if the managers selected by the market process are too stupid or selfish to actively implement the conditions for profit maximum but clever enough to understand that they will have to mimic successful competitors in order to survive.

The problem, however, is the assumption of ideal market conditions. If such conditions are not present, it is not easy to talk about the efficiency promoting effects of competition. Consider the example of environmental pollution to clarify the point. Without competition, a management with a romantic, nature-loving orientation could survive, but under competition it has no chance. Businesses that maximize their profits and minimize their private operating costs will prevail, and these are the environmental polluters.

The Selection Principle states that ideal market conditions tend to exist in private competition but not in competition between states, and this raises doubts as to the efficiency of systems competition even if national governments are too ignorant or selfish to actively pursue a policy of national welfare maximization. For a similar reason as in the case of private firms, competition will force even the badly functioning governments to mimic their successful neighbours who

[6] For a criticism of this view see Edwards and Keen (1996) who showed that systems competition may even exacerbate the political distortions.

managed to find better policy mixes with regard to the mobile factors of production, but such policy mixes need not be better from an international welfare perspective.

In this book it will be assumed that the behaviour of the individual country serves the goal of maximizing national welfare, given the behaviour of other countries. Despite, or better, because of the perfect achievement of this goal, systems competition turns out to be defective in a number of cases. As correct as the thesis that systems competition forces the nation state to seek national efficiency is, it does not follow from this that systems competition in itself is efficient.

The book does not assume benevolent politicians, but it abstracts from the distortions in the democratic voting process resulting from lobbying activities of the kind the public choice school has emphasized. It assumes a well-functioning democracy. Selfish politicians who want to be re-elected in a democratic voting process maximize domestic rents and choose policy moves that are Pareto optimal from a national perspective, for if they did not, they would be beaten by others who offer such policy moves. The focus is directed entirely on a study of the effective functioning and possible failures of systems competition when the competing countries themselves act rationally in the national interest. The name *systems economics* may be appropriate for this study area.

Systems Economics and the Hierarchy of Competitive Processes

Systems economics examines the functioning of systems competition under the idealized assumption that the national governments are not interested in the general welfare of all countries but in the well-being of their own citizens. Thus the methodological procedure of systems economics corresponds with the standard economic model used to analyse private allocation processes, which is based on the assumption of a rational individual choice by Homo oeconomicus.

Somewhat heroically the economist assumes that firms are capable of maximizing their profits and households are capable of maximizing their utility, disregarding the internal aggregation problems within these groups of individuals. These assumptions are not made because anyone believes that they are strictly true, but in order to avoid the danger of confusing failures in the rules of the game in which these groups participate with coordination failures inside these groups themselves. Problems in the internal organization of firms, deficiencies in the rules of conduct within a household or psychological inadequacies in people's minds are disregarded. This methodological constraint leads to policy recommendations that are free from dictatorial welfare objectives, satisfy the principle of methodological individualism and minimize the risk of calling for overdrawn government interventions. The analysis of coordination failures at lower levels of decision making is left to other disciplines including the economics of the family, business economics, psychology and sociobiology. Such failures are there, but they contribute little to the foundation of economic policy within a country.

A similar remark is appropriate for systems economics when the question is whether uncoordinated government actions lead to an efficient equilibrium. Here the national government is assumed to act like Homo oeconomicus in order to minimize the risk of fallaciously diagnosing a deficiency in systems competition and deriving an excessive demand for supra-national policy actions. It is true that there are failures within the political systems of the single countries involved, but once again such failures contribute little to the foundation of economic policy measures to be taken by centralized government bodies such as the European Parliament or the EU Council of Ministers.

The study of the internal deficiencies in the government sector can be left to the public choice school, which has specialized on this topic and which itself makes similar abstractions on a lower level of the decision hierarchy. The public choice school assumes that politicians are rational

agents and private markets function well, leaving the analysis of mental deficiencies and market failure to other disciplines. The public choice theorist knows that the failures of the internal political competition can only be isolated when clever, maximizing politicians, households and firms are assumed, and the systems economist knows that failures of systems competition can only be isolated when clever, welfare-maximizing governments are assumed.

Similar remarks can be made about the business economist or the family economist who, using the principal agent model, derives internal rules which lead to the desired success of the firm or household under the assumption of clever, utility-maximizing employees or household members. The principal agent model does not attempt to find rules that make dull employees behave efficiently but, instead, rules which encourage smart employees to work harder, and it explains the economic behaviour inside the household, assuming that the household members are rational agents rather than assuming that they are dunces.

Systems economics studies the competition between states. The public choice school studies the competition between politicians within a single state. Economic theory studies the competition between households and firms in private markets. Business economics studies the interaction between the employees within a firm. And the economics of the family studies the interaction of household members. Each of these disciplines looks at the interactions between individual decision makers, abstracting from the deficiencies inside the aggregates which they call agents. They all assume that the agents of their models behave rationally, and ultimately they attempt to find rules and constraints that ensure the emergence of collectively rational actions that are compatible with individual rationality on the part of these agents. The business economist looks for internal worker-incentive structures that ensure profit maximizing behaviour within the firm. The family economist tries to find social norms or legal rules for economic behaviour within the family that result in a Pareto-efficient intra-household allocation of resources and a rational behaviour of the

household in the marketplace. The economist, here especially the public finance economist, tries to optimize the government laws and regulations so that households and firms interact in an efficient manner. The public choice theorist tries to find constitutional rules which ensure that the politicians act according to the wishes of their voters. And finally the systems economist will attempt to find welfare improving restrictions on the competition between economic systems that makes the national governments behave efficiently. That this attempt has not yet got very far, because the theory of systems competition is still in its infancy, is quite another story.

Table 1.1 Systems economics compared with other economics disciplines.

Discipline	*Object of study*	*Rational actors*	*Normative level*
Systems economics	Systems competition	Governments, parliaments	Federal constitution, harmonization rules
Public choice	Political competition	Politicians, voters	National constitution
Economic theory Public finance	Market competition	Households and firms	Laws and regulations, discretionary policy measures
Economics of the family	Interaction between family members	Individual family members	Rules of conduct and moral obligations
Business economics	Business organization, intra-firm competition and cooperation	Employees, managers	Remuneration systems, personnel management, structural planning, etc.
Sociobiology	Interaction of genes	Genes	

Table 1.1 shows how systems economics fits into the edifice of economic disciplines. It also contains the category of sociobiology, because in a sense it is also part of this edifice. Sociobiology assumes that rational and selfish genes interact in the biological, evolutionary process so as to maximize their individual survival probabilities, and it points to a host of circumstances where individual survival maximization by the genes will not lead to collective maximization in the

sense that a person's survival probability is maximized.[7] The kinds of problems treated in the theory of evolution are very similar to those analysed in the economic disciplines, and similar tools have been used to analyse them. The only difference is the lack of a normative component. Normative sociobiology in the sense of setting new rules for a better outcome of the evolutionary game among genes does not exist, except perhaps for the rules of targeted plant and animal breeding. Nevertheless a similar discipline might some day come into existence when competitive evolutionary processes are used to generate new computer generations and software programs. Certainly there is such a thing as good and bad rules under which the evolution of software programs should take place, and defining these rules would be similar to thinking about the legal superstructure of a market economy or the rules for a workable systems competition.

It is extremely difficult to comprehend the hierarchy of the competitive decision processes through which human actions are determined. Since the limitations of the intelligence of the social scientists (the author of this book included) mostly only allows one hierarchy level to be analysed at a time, appropriate simplifications may be made at this level which do not prove to be appropriate for the analysis at another level. The public choice theorist must question the assumption of the rational state made by the systems economist just as the economist and the sociobiologist may wish to put aside the public choice assumption of an efficiently functioning private competition and an efficiently operating brain of Homo oeconomicus. And the business economist can no more accept the economist's assumption of the profit maximizing firm, for then he would be superfluous, unable to earn his income. All this is not contradictory, because abstractions which are correct for all the questions that can be asked cannot be found in science.

Where rational economic behaviour is assumed as a simplification depends on which level of the human decision hierarchy is being studied. When, as this book does, the level of systems

[7] See Wilson (1975) and Dawkins (1976).

competition is studied, it appears reasonable to abstract from irrational or undemocratic government behaviour and assume that governments act in the interest of their citizens.

Despite the common assumption of rational economic behaviour, the different economic disciplines naturally cannot assume the similarity of the allocation mechanisms or the similarity of the technical constraints under which the respective decision makers act. It is precisely these differences on which the independent knowledge interests of the individual disciplines are established. The special aspects of the theory of systems competition are to be found in assumptions about the nature and determinants of international migration processes and the particular activities that the competing governments carry out.

Systems Competition: A Construction Principle for Europe?

Understanding the new systems competition is important for Europe because this continent has entered a historical phase where the rules under which its countries interact are changing rapidly. A few decades ago, the borders of the European countries were closed for migrants, customs duties had to be paid on cross-border transactions, and most countries even had capital controls. Today, the customs duties and similar trade barriers have disappeared, capital controls and limitations of the right of residence among the EU countries have been abolished, and the countries participating in the Schengen Agreement have even dismantled their borders physically. People, goods, services and capital are able to move freely and unhindered between all countries of the European Union. The ‘four basic freedoms’ that were proclaimed in the 1957 Treaty of Rome have at last become reality, and soon these freedoms will be granted to the eastern European countries when they join the EU.

Under these conditions the question arises as to what the construction principle for the new Europe should be. What should be the rules under which the countries interact, where are decen-

tralized actions allowed; where is harmonization useful and where is centralized action by authorities in Brussels required? These are eminently important issues for Europe which the economic discipline should try to address, but thus far its efforts have been small. Very little is known on this matter.

This book is a limited contribution to closing the knowledge gaps. It does not try to construct the rules for the new Europe, but it will try to check the validity of the frequently made recommendation to base the new Europe on systems competition, i.e. to wait and see how it evolves through independent actions of the single nation states without control or help from Brussels. The analysis will show that there are a number of attractive aspects about systems competition, but it will also show where the problems are and then make a few suggestions for corrective policy moves.

To make constructive recommendations for international European policy moves is a delicate matter, since a workable theory of bureaucratic behaviour is not available, and this book cannot offer one either. The recommendations should therefore be in line with the Subsidiarity Principle defined in the Treaty of Maastricht. The principle requires taking as little centralized action as possible. First, thought should be given to whether the rules of systems competition can be improved. Next a jointly agreed-upon harmonization should be examined, and only then should a direct policy intervention of Brussels be considered.

The direct intervention of Brussels is problematic because it not only costs money but also leads to new dangers. These include misuse and the creation of further opportunities for successful rent seeking by interest groups. There are already reasonable doubts about the effectiveness of the Brussels administration. The impression that it is too strongly influenced by producers' interests and that too little attention is being given to interests of the European consumers cannot always be denied.

However, one must be careful not to throw the baby out with the bath water. A political nirvana model that measures the actual policies of the European Union against the noble ideal of infallible political decisions and denies these policies any justification as soon as they fall short of this ideal leads nowhere. What Demsetz (1969) demanded for judgements about private allocation processes, can equally well be justified for political allocation processes. Reality always looks bad compared to utopias.[8]

It is certainly true that deriving political implications based on market failure is problematic because there may be government failure in the realization of a policy. A failure of systems competition must not automatically lead to an indiscriminate transfer of responsibilities to a central European government without careful examination. On the other hand, such a failure is a necessary condition for political interventions by the centre, and thus the economist should be allowed to think about sensible interventions. A ban on such thoughts, which many transaction costs economists would like, and the political nihilism that they preach, lead nowhere. When there is a failure in systems competition, it is completely reasonable to discuss alternative political measures for avoiding this failure.

That being said, it should be emphasized at this point that this book will not only analyse the failures of systems competition, it will also discuss harmonization rules to overcome them. In many cases the analysis will show that there is no failure, and, when there is, the policy recommendations will often involve the definition of better rules for the competitive interaction of countries rather than a plain harmonization. The refutation of the social dumping argument in chapter 4 is an example for the former possibility, while the recommendation of the home country principle for migrant welfare recipients in Chapter 3 or the self-financing constraint for public infrastructure in chapter 2 are examples for the latter.

[8] See also Wittman (1995).

At the European Union’s Nice Summit in December 2000, it was agreed to hold a new conference in 2004 to discuss the practical implications of the Subsidiarity Principle and to define the allocation of government functions to the different levels in the governmental hierarchy between local communities, provinces and nation states, and the administration in Brussels. An analysis of the workability of systems competition among the European nation states as is carried out in this book is a timely exercise in this context. It seeks to contribute rational arguments to the new European discussion, even though it cannot give ultimate answers.

The Euro and the Integration of Capital Markets

Free migration of capital and labour in a fully integrated economic space is the force that triggers off the new type of systems competition in Europe. There is no symbol which better characterizes this force than the euro, Europe's new common currency.

The euro not only symbolizes the political determination behind European integration, but it also has directly increased the mobility of factors of production and goods within Europe because it abolished the risk premia resulting from the volatility of exchange rates. These risk premia were very large. Some years ago, Italy and Spain, for example, had interest rates that were about 5-6 percentage points higher than German rates, and the investors in these countries had difficulties borrowing in international capital markets. The uncertainty of exchange rates was a substantial barrier to international transactions that segregated the capital markets even though all formal barriers had vanished. Private savers and borrowers were effectively excluded from many transactions, especially from taking international loans with long-term, fixed interest rates. Little capital therefore flowed from the richer to the poorer countries, and the driving forces of the new systems competition were effectively checked. This is now all long since past. The euro has created an almost perfect market for capital and goods within Europe, and unbridled competition for

mobile capital has started. The statistics available confirm this very impressively. While the standard deviations of the interest rates on ten-year government bonds and the inflation rates (national consumer prices) of the 11 Euroland countries[9] were still at 2.33 and 1.57 percentage points respectively in 1990, by Spring 1998 both had fallen to a minuscule 0.40 percentage points. Figure 1.1 illustrates the interest convergence for ten-year government bonds. It demonstrates how strong the euro's implications for the capital markets have been.[10]

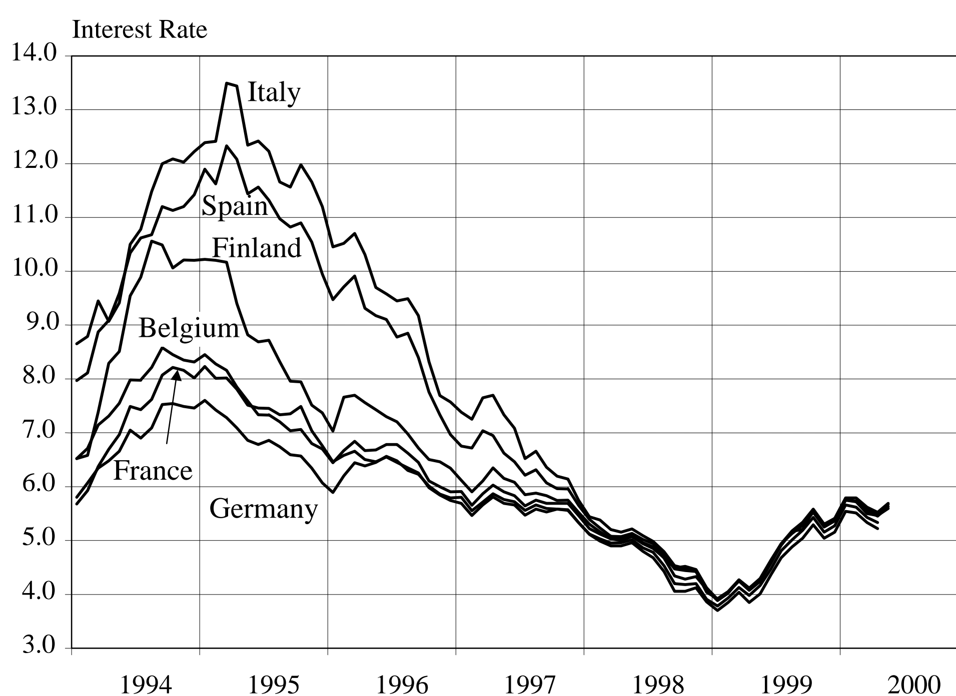

Figure 1.1 Convergence in the European capital market: long-term interest rates in Euroland.

Source: Deutsche Bundesbank (database).

9 Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain.

10 It is sometimes argued that capital market integration should be judged by real rather than nominal interest rate convergence, where real interest rates are defined as the difference between nominal rates and the respective national inflation rates. This view is fallacious, though. It is one of the fundamental efficiency requirements for a currency union that all countries' marginal value products of labour plus the respective national inflation rates (the 'own' rates of return) be equal, and profit maximization implies that this requirement is met if the nominal rates of interest are equal (see Dorfman, Samuelson and Solow 1958). Efficiency can be expressed in terms of an equality of real rates, too, but then real rates will have to be defined by subtracting from the national inflation rates the rate of price increase of the *same* numeraire basket of commodities. Obviously, this procedure would imply the same perfect convergence as depicted in figure 1.1.

It has been suspected that the convergence of interest rates was the result of the sound fiscal policies enforced by the Maastricht treaty rather than the elimination of the exchange risk. With a lower debt-GDP ratio, the risk of default is lower and so the risk premium can be lower. This view, as plausible and desirable it was from the viewpoint of many central bankers, is not well founded in the data, though. If it were correct, the debt-GDP ratios would have had to decline significantly to produce the convergence pattern shown in the figure, but they did not. Even though the countries were forced to cut their budget deficits, the impact on the respective stocks of debt was small. Moreover, there was no visible relationship between the countries' debt-GDP ratios and the convergence of interest rates. Finland and Spain, for example, always had very moderate debt-GDP ratios, but nevertheless their interest rates participated in the smooth geometrical convergence process depicted in figure 1.1 just as those of the other countries did.

The euro will reinforce the kind of pressures and constraints that the capital markets have already imposed on Europe's national policy decisions in recent decades. The first sign of the importance of these constraints was the strong reaction of capital movements after Germany had introduced a withholding tax on interest income in 1989. The withholding tax had a rate of 10%, and it was meant to counter tax evasion. It led to a flood of capital exports in the first six quarters after the measure was taken that was far larger than policy makers had anticipated. A long-term capital import of DM3 billion in the year before the announcement turned into a long-term capital export of DM95 billion in the year following it.[11] The evasive reaction was so strong that Germany was forced to rescind its law only six months after it was introduced. The second attempt to tax interest income at source in 1992 only appeared to be more successful since the evasive reac-

[11] See Nöhrbaß and Raab (1990).

tion was avoided because interest income earned by foreigners in Germany was exempted from the start.

While the German withholding tax is a prepayment towards the personal income tax, which has no real significance for honest tax payers, Sweden and Austria were sufficiently impressed by the German experiment to even give up the principle of synthetic income taxation to improve their position in the competition for mobile capital. Instead of including interest income in the general income tax base, they burden interest income with a final and separate tax of only 30% and 25%, respectively. These were remarkable decisions, marking a new phase of tax competition. The competitive pressures have been so strong that the EU countries are now discussing harmonized minimum source tax rates for interest income.

Erosion phenomena also show up clearly with corporate taxes. Following the dramatic fall in tax rates from 46% to 34% which the United States decided on in 1986, many other countries undertook similar tax reforms of their own and also lowered their tax rates. Thus the average tax burden which the (current) 15 EU governments imposed on the US firms that operate within their borders fell by more than 12 percentage points between 1986 and 1992 (see figure 1.2).

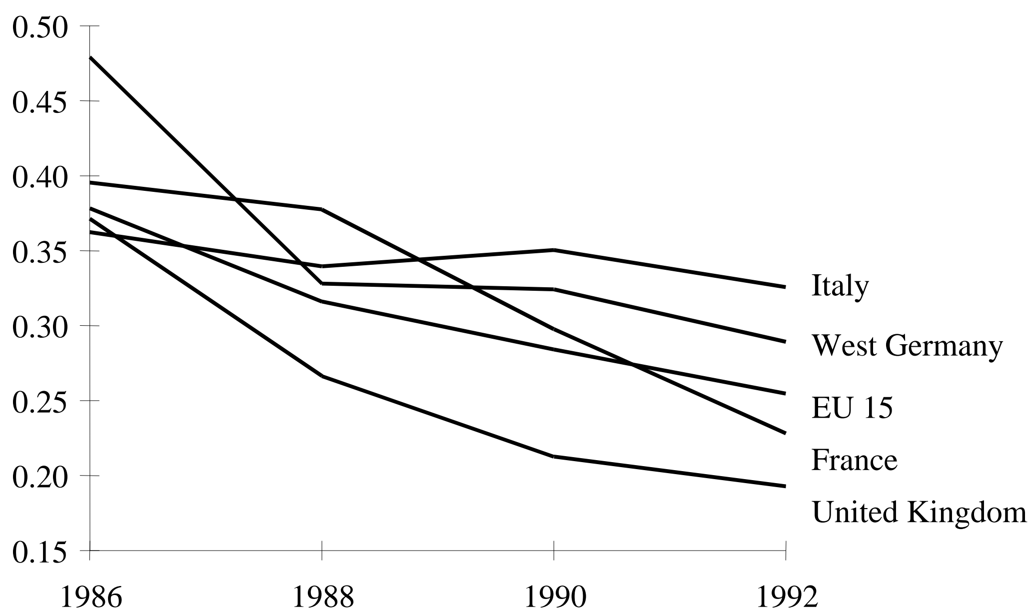

Figure 1.2 Average tax burden on subsidiaries of US corporations in Europe after 1986 US tax reform.

Legend: The average tax burden was calculated from information from US firms about income and taxes paid by controlled firms in Europe, i.e., firms which are at least 50% owned by American companies. The average tax burden is defined as the relationship between paid out taxes and profits, where the latter are determined according to US rules for the preparation of balance sheets. The change of the valuation rules to the determination of profits also finds expression in the average tax rates in this way. The average tax burden for EU 15 uses national products as weights. *Source:* Altshuler, Grubert and Newlon (1998), table 1A.

The trend remained unchanged in the period following the US reform. Even a large country like Germany was forced to change its corporate tax law substantially. In 1994 Germany introduced a so-called ‘Location Preservation Law’ which reduced its corporate tax rate from 50% to 45% for retained profits[12] (from 36% to 30% for distributed profits), and in the year 2000 Germany enacted a further, even more dramatic, cut in the corporate tax rate for retained profits from 45% to only 25%. Italian and French reforms to match this move are already under way.

[12] In 1999 corporate tax for retained profits has been further reduced from 45% to 40%.

Some of the smaller European countries felt the competitive pressure even earlier. Ireland has carried out a particularly aggressive industrial location securing policy since it joined the EU in 1973, being content with a corporate tax of only 10% for a limited number of sectors. In 1987 Ireland extended the regulations, which had originally only applied to manufacturing and special services, to financial services within the International Financial Service Centres in Dublin and at Shannon Airport. This led to a large flow of financial capital into Ireland which forced other countries, notably Germany, to take action against the transfer of assets from domestic parent companies to their Irish subsidiaries.

The Netherlands and Belgium have copied the Irish idea by also treating international financial investors very well. They charge financial service companies and holdings with the normal corporate tax rate, but allow these companies to make deductions of up to 80% of their revenues, which, in the Dutch case, effectively reduce the corporate tax rate to 7%.[13]

The erosion of corporate tax rates and the corresponding loss of revenue has partly been countered by an increase in labour taxes. Figure 1.3 shows the time paths of the labour tax share in the respective national tax revenues for a number of OECD countries as well as for the OECD average. On average this share increased from 45.5% in 1965 to 58.7% in 1997.

[13] See Mennel and Förster (1999).

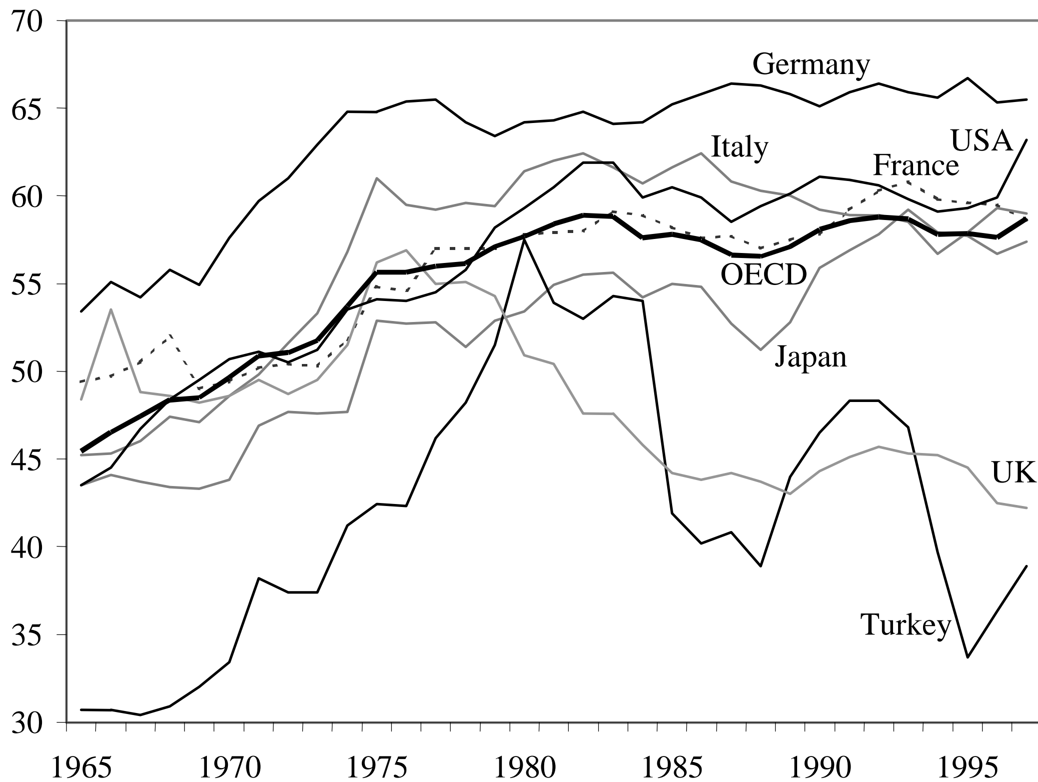

Figure 1.3 The increasing share of labour taxes in the OECD countries.

Legend: (1) The OECD labour tax share is measured as the GDP weighted average of each member country's share of labour taxes in the respective total tax revenue. (2) Labour taxes are calculated as the sum of individual income taxes, social security contributions, and taxes on payroll and workforce. (3) Tax data on Mexico, Iceland and South Korea were not available. Eastern European OECD countries (Poland, Czech Republic and Hungary) are not included.
Source: OECD Revenue Statistics (1999), OECD National Accounts (1999), own calculations.

These trends of the past are likely to continue in the future because integration of the world capital market, and in particular the internal EU capital market, is proceeding fast. In the future there will be more rather than less fiscal competition, and this may erode the capital taxes further, forcing labour taxes to fill the increasing gap. The factor labour could be the victim of systems competition.

Migration in Europe

The shift of the tax burden from capital to labour income is likely to result from the fact that labour markets are less integrated than capital markets and that the fiscal competition in these markets is therefore much lower. Up to now different languages and cultures as well as remaining institutional hindrances in the labour markets have prevented most people from leaving their native countries in the light of the existing wage differences in Europe, and hence these differences disappear only gradually with the passage of decades rather than years (cf. chapter 4).

Wages definitely have not converged like interest rates (figure 1.1). In 1998 the Irish hourly wage costs in manufacturing were only €12, while in west Germany they had reached a level of €24. With a weighted average of the EU hourly wage costs of €17, the standard deviation of these costs was €5. That is, wages in about one-third of jobs deviated from one another by more than €12.[14]

Despite the relatively large degree of inflexibility in the labour markets, it would however be wrong to ignore the mobility currently available to workers in Europe and the foreseeable increase in flexibility in the decades to come. The freedom to settle anywhere in the EU, which has been legally available since 1970, and the freedom to provide services, which was fully granted in 1992, have led to a new situation which may require a revision of the conventional wisdom that labour mobility is negligible.

Apart from the internal EU migration, which has yet to develop, there was already a strong movement of labour in the years following the fall of the Iron Curtain in 1989. People who for decades had been imprisoned in the communist countries saw a way to escape, and a mass flight to the west resulted until the west itself increased its entry barriers by tightening its asylum laws.

[14] The employment figures in manufacturing in the different countries were chosen for the weights. See Eurostat, *Eurostatistik: Daten zur Konjunkturanalyse*, vol. 3, Brussels, 1998, p. 46; and Schröder (1999).

The post-communist migration flows culminated in the year 1992, when Germany alone absorbed more than 800,000 immigrants. Figure 1.4 gives an overview of the European migration flows in the peak year 1992.

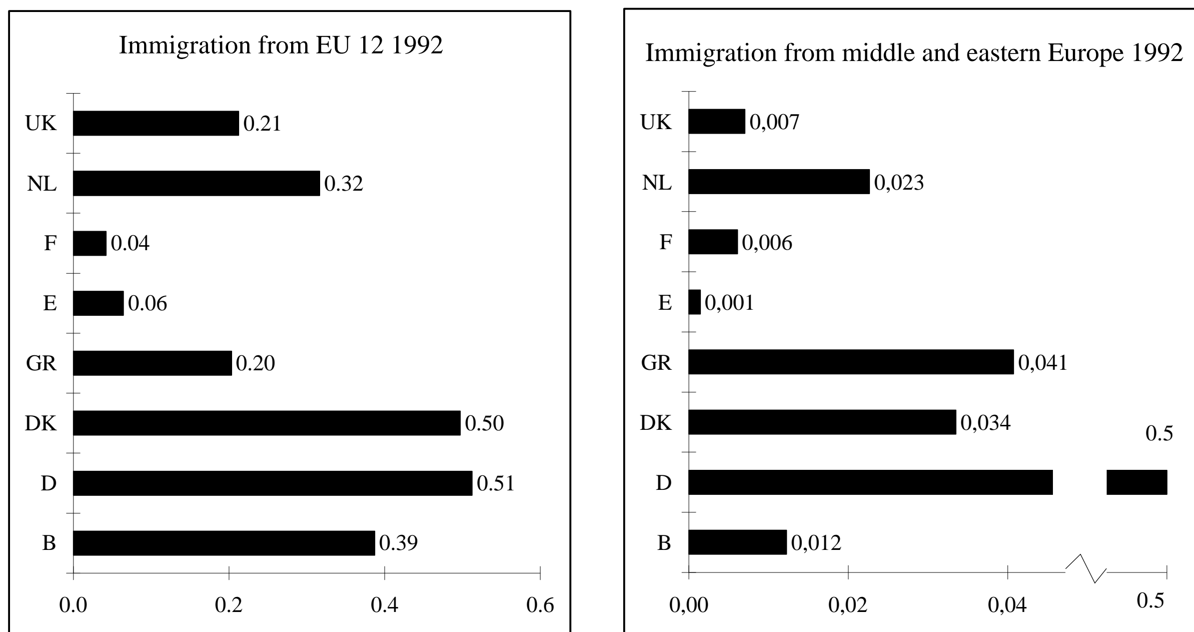

Figure 1.4 Migration in Europe 1992.

Legend: Gross immigration as percent of the total population of the immigrant country.
Source: Eurostat, *Wanderungsstatistik 1994*, pp. 41, 42.

Immigration to Germany was particularly high at that time because Germany had Europe's most liberal immigration law, giving political refugees from all over the world the legal right to apply for asylum. Meanwhile, the asylum law has been modified so that it is more in line with other countries, and the immigration flows have shrunk accordingly.

However, the official immigration figures do not capture the illegal immigration, which may be substantial. Most of the illegal German immigrants come across the Czech border, since this

border is no longer fenced in and the inhabitants of the former Eastern Bloc can enter the Czech Republic without visas. The random checks by the German customs and immigration officers make the entry of the economic refugees from eastern Europe difficult, but not impossible.

On the whole, the size of the migration flows is not yet quite comparable to the wave of immigration into the United States at the turn of the century. Annual US immigration between 1900 and 1910 was on average around 1% of the US population.[15] In comparison, (legal) immigration in western European countries was on average only 0.35% between 1980 and 1992.[16] Only Germany had figures resembling those of the US for some of these years. Nevertheless, the European population movements triggered off by the fall of communism can be classified as large. In many places they have led to considerable popular resistance, put pressure on the labour markets, and caused substantial burdens for the social systems of western Europe. Half of the immigration to Germany during the 1990s was an immigration into unemployment and welfare receipt.

From a theoretical perspective, labour migration should be particularly important at the top end of the income scale, and indeed rich people have increasingly transferred their domiciles to low-tax countries in recent years. The richer someone is and the more taxes he or she can avoid, the less important the costs of such transfers become and the stronger the incentive to carry them out.

However, in fact, the migration at the bottom end of the in income scale dominated due to the waves of refugees from eastern and south-eastern Europe during the 1990s. The migrants from these regions tried to move into the EU to get away from the catastrophic economic and political

[15] *Encyclopaedia Britannica*, ‘Migration’, vol. 15, London, 1957, p. 466.

[16] United Nations Population Fund, *The State of World Population*, 1993, New York, p. 16, and database: Summers et al., Penn World Table, Mark 5.6a, own calculations.

situation in their own countries, and only the severe constraints imposed by western countries kept the migration in check.

Migration at the lower end of the income scale will strongly increase when the east European countries become EU members, because then the right of residence will be granted for the purpose of working in another EU country. In the year 2000 there were entrance negotiations with Estonia, Lithuania, Latvia, Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Malta and Cyprus, and it is expected that, with the exception of Cyprus, these countries will join the EU around the year 2004. In total, 75 million people or 20% of the current EU population are expected in the first accession wave, and another 30 million are still waiting for accession, not counting Turkey with its 70 million inhabitants.

It is unclear how many of the east Europeans will migrate to western Europe, but the potential is large because the economic situation in eastern Europe is still far from satisfactory. In 1998 the average wage cost per hour was only 13% of that in west Germany in the first-wave applicant countries. Even under very optimistic assumptions it will not be possible to increase the wage rate above one-fifth of that in west Germany until the scheduled time of joining the EU. Therefore, large migration flows must be reckoned with. According to an econometric study by Sinn, Flaig, Munz and Werding (2001), between 3 and 4 million people will migrate to western Europe from the first wave of accession countries over a period of 15 years. A poll conducted by the International Organization for Migration (1998) suggests even higher emigration figures.

It has been argued that the example of southern expansion by integrating Spain and Portugal has shown that there will not be much migration after EU accession. However, for at least two reasons the Iberian example does not fit to the east European case. First, wages were much higher. Measured at current exchange rates, they were 47% of the west German wages rather than 13% in the east European case. Second, most potential migrants had already left their countries

before the time of EU accession. Between 1960 and 1974, the time when the dictatorships in Portugal and Spain ended and EU membership was prepared, no less than 5.5% of the Iberian population had emigrated in net terms, even though there was much immigration to Portugal and Spain from its former colonies in this period. These emigrants could not emigrate a second time when the EU membership came, and in fact many of them returned to their home countries. The crucial difference with eastern Europe was that during the time of the Iberian dictatorships there was no Iron Curtain to prevent people from emigrating. The Iron Curtain had maintained the emigration pressure in eastern Europe and shortly after it was lifted the western countries tightened their immigration laws, erecting a legal barrier instead of the physical barrier. If this legal barrier is lifted too, the migration flows from eastern Europe will be substantial.

Given the size of the wage differential with eastern Europe, the foreseeable migrations as such are not indicators of high, let alone perfect, labour mobility. It is only people's expectation that their own income can increase many times over that triggers mass migrations. However, the east–west migration will imply that there is almost perfect *differential mobility* between the western European target countries, and such a differential mobility is likely to be enough to set the systems competition in motion. Anyone who decides to turn his back on his own country will make the choice of the target country primarily dependent on economic conditions and will be guided by the smallest differences in expected living standards. This in turn will motivate the European governments to think hard about the designs of their welfare systems.

Quo Vadis Europe?

The direction in which the new Europe will develop under the influence of people and production factor mobility is one of the most important questions of the time, but its answer is not yet known. Too little is known about the mechanisms of the competition between systems.

That there will be dramatic changes is obvious. The signals that will put the national governments on the alert are mounting in any case. Welfare states like Holland and Sweden have carried out great debates about industrial location which have resulted in fundamental reform of the government sector and the labour market institutions. In Germany such a debate is in progress, and very substantial reforms of the tax and pension systems have been carried out.

It is not clear where the tax competition will lead and it is also not known what changes in government expenditures will result. In the end a location decision depends not only on tax rates, it also depends on the legal regulatory framework that a country has to offer, and on the amount of total government expenditures that are tax-financed. Firms that are willing to relocate may well be prepared to pay higher taxes for a good infrastructure.

It is also not clear how the political integration of Europe will proceed alongside the intensification of systems competition. The range of possibilities includes an uncontrolled systems competition, the development of a regulatory framework for this competition, a political agreement to harmonize fiscal conditions and finally the establishment of a new European central government with extensive sovereignty and budgetary rights.

Given the multitude of opinions, it borders on clairvoyance to attempt to make a prediction about the extent of political integration in Europe. Nobody knows how quickly the political union will go ahead and what the final state will be. This book makes no prophecies, it only offers conditional predictions for the theoretical case of unbridled systems competition and political counter measures that would falsify the predictions should they not be pleasant.