CHAPTER 1

Fiscal Decentralization: Benefits and Problems

Active tax competition, in short, tends to produce either a generally low level of state–local tax effort or a state–local tax structure with strong regressive features. George Break (1967)

The mobility of individual economic units among different localities places fairly narrow limits on the capacity for local income redistribution.
Wallace Oates (1977)

Policies that promote residential mobility and increase the knowledge of the consumer–voter will improve the allocation of government expenditures in the same sense that mobility among jobs and knowledge relevant to the location of industry and labor improve the allocation of private resources.
Charles Tiebout (1956)

If jurisdictions compete with each other and taxpayers/consumers are able to vote with their feet, there may be fairly strong pressures for subnational governments to respond to the wishes of the electorate.
Charles McLure, Jr. (1986)

1.1 Assignment of Government Functions and Mobility

1.1.1 Assignment of Government Functions

Issues of public finance appear in a new light when an economy is divided into several regions. If a state consists of many jurisdictions, the question arises of how to assign the various government activities to different governmental levels. The general functions of the government – to support an efficient allocation of scarce resources (where the private sector fails to do so) and to guarantee a fair income distribution – must first be divided into several components. Once a fundamental line of government policy is chosen, these functions must be assigned to the jurisdictions. However, such an assignment cannot be made once and for all; it critically depends on the economic environment that characterizes the federal state.

A substantial increase in interregional mobility, which we can observe today in many federal states, changes the economic environment in an important way. For the problem of decentralizing government activities, mobility across regions is a critical factor. This can be illustrated by considering the use of a head tax. In a unitary state, the head tax does not distort economic decisions and is therefore, leaving distributional problems aside, an ideal instrument for financing government expenditures from an efficiency viewpoint. If, however, households are mobile across the regions of a federal state then any uncoordinated use of head taxes by regional governments causes pure fiscal incentives to relocate, leading to migration distortions.

The question of an optimal assignment of government functions to several governmental levels does not arise only in long-established federal states. It is also relevant when independent states grow together. For example, the member states of the European Union (EU) want to appropriate the benefits of the international division of labor. They committed themselves to abolish any borders among them on January 1, 1993, and to guarantee the *four fundamental economic liberties:* goods, services, capital, and labor can now move freely among all member countries without any legal obstacles.[1] Although this right reflects a de jure rather than a de facto freedom of movement in Europe, the European countries grow more and more together and will form an economic unit. Today and in the immediate future, the EU member countries must decide which government activities they will assign to the EU itself and hence to a supranational European institution. In other words, how much Europe is necessary for an economic unification?

The Maastricht Treaty of 1991 (Treaty on the European Union) seems to decide in favor of a strong decentralization of government functions. In order to calm down such Euro-skeptics as Denmark, Germany, and Great Britain, the "subsidiarity" principle of decisions was introduced into the treaty. This principle means that only those functions should be assigned to the EU center that cannot satisfactorily be fulfilled by the member states. However, taking a closer look, the meaning of the subsidiarity principle is rather empty. Its main purpose is to delegate the burden of proof to those member states that want to have a stronger centralization (see Sinn 1994). Aside from this, there is no operational criterion that can be used to decide which government activities should be assigned to the center and which tasks can still be placed in the hands of the individual member countries.

Contrary to the situation in long-established national federal states with rather rigid institutional structures, an optimal or less demanding – an economically reasonable – assignment of governmental functions could be realized in the EU.[2] The division of government tasks is still an open question after Maastricht and offers a real chance to Europe. It is therefore rather surprising that

[1] Padoa-Schioppa (1987) provides a comprehensive overview of the benefits of free trade in goods and services and an unconstrained migration of labor and capital.

[2] The German unification provides an example of how difficult it is to overcome a given assignment of government functions in long-established national federal states. The division of functions

the political discussion of how much Europe is necessary is lacking a foundation in terms of economic theory. Many contributions discussing that problem consist of long philosophical debates about normative legal principles and of rather artificial analogies between the competition of firms and regions. The purpose of the present book is to establish such an economic foundation.

1.1.2 Mobility and Taxation: Empirical Facts

In enhancing the mobility of goods, capital, and people, economic integration leads to an increased international mobility of tax bases. As many economists expect, this will imply a downward pressure on national tax rates and welfare benefits. Our objective in this section is to investigate if an increasing degree of mobility as well as lower taxes on mobile bases can actually be observed in existing federations.

For this purpose, we consider the development within two federations: the EU as a still-growing union of national states; and the United States as an existing, rather homogeneous federal state. Let us first turn to the EU. An interesting observation is that per-capita gross domestic product (GDP) levels have been converging among the twelve EU members since 1960, as Table 1.1 shows. This convergence cannot be explained by a single factor. However, besides the reduction of real income disparities due to EU transfer programs (such as the European Regional Development Fund and the European Social Fund), convergence can be taken as evidence that free trade in goods, capital, and labor in the EU – guaranteed by the Treaty of Rome – has had an effect.

Because subsequent chapters concentrate on the mobility of factors and its implications for tax policy, it is of particular importance to see how capital and labor mobility have changed over time. Table 1.2 indeed demonstrates that there is an increasing degree of capital mobility in the EU. A comparison of the growth of direct investments within the EU (intra) with the growth of those coming from (extra inward) or going outside (extra outward) the EU shows that capital mobility among member states has increased to a much larger extent than capital mobility between the EU and the rest of the world.

Most current data indicate that the level of intra-EU capital mobility rose further compared with extra-EU capital mobility. Owing to the increased attractiveness of the EU to other countries for direct investments, the ratio of intra- to extra-EU direct investments almost reached unity in 1995. This could be interpreted as the achievement of equal importance of direct investments from within and from outside the EU (Eurostat 1997a).

between the federal government and the old state governments has simply been extended to the relation between the federal government and the *Neue Länder,* although this unique historical event would have provided a chance to think about the division of tasks in more systematic terms and to establish a greater revenue autonomy for the state governments, which is an old yet unsolved problem in Germany.

Table 1.1. *Divergence of GDP per capita among the EU: GDP per capita relative to the EU average*

	1960	1970	1980	1990	1993
Belgium	97.5	101.1	106.4	104.9	106.2
Denmark	115.2	112.2	105.0	105.8	107.5
France	107.7	112.7	113.9	110.0	111.9
Germany	124.3	118.6	119.1	117.6	116.4
Greece	34.8	46.4	52.3	47.5	47.8
Ireland	57.2	56.1	60.2	69.0	71.6
Italy	86.6	95.5	102.5	102.8	104.0
Luxembourg	155.3	138.4	115.6	127.2	129.8
Netherlands	116.8	114.1	109.2	102.4	102.6
Portugal	37.2	46.9	52.7	53.7	58.1
Spain	58.3	72.2	71.7	75.4	77.2
United Kingdom	122.6	103.5	96.4	100.5	96.2
EU 12	100.0	100.0	100.0	100.0	100.0
Standard deviation	36.6	29.1	24.4	24.3	23.8

Notes: Per-capita GDP is given at current market prices per head of national population and in purchasing power parities. Figures for 1993 are estimated; figures for Germany refer to the former Western part.
Source: Commission of the European Communities (1993).

Table 1.2. *Growth in intra- and extra-EU direct investments*

	Average annual growth rate		
Investment	1984–89	1984–91	Total growth 1984–91
Extra inward	35.3%	19.3%	344%
Extra outward	13.8%	6.0%	54%
Intra	51.6%	32.7%	724%

Sources and definition of investment: Eurostat (1991, 1994); see also Lejour (1995).

Considering tax policy during that time, Table 1.3 indicates that governments have lowered statutory overall corporate tax rates. Although there is no clear-cut interpretation of these developments, international tax competition might have been a driving force.

As far as labor mobility is concerned, individuals seem to be considerably less mobile than capital across EU member states. According to our own calculations (based on Eurostat 1993, 1995a, 1996),[3] annual mobility rates in 1991,

[3] As registrations of migratory flows within the EU are still not harmonized among the member states, data concerning this subject are very rough and hence subject to severe measurement

Table 1.3. *Statutory overall (national and local) corporate tax rates in the EU*

	1980	1985	1991	1992
Austria	61.5/38.3	61.5/38.3	39.0	39.0
Belgium	48.0	45.0	39.0	39.0
Denmark	37.0	50.0	38.0	38.0
France	50.0	50.0	34.0/42.0	34.0
Germany	61.7/44.3	61.7/44.3	56.5/44.3	58.6/46.0
Greece		49.0	46.0	46.0
Ireland	45.0	50.0	43.0	46.0
Italy	36.3	47.8/36.0	47.8/36.0	47.8/36.0
Luxembourg	45.5	45.5	39.4	39.4
Netherlands	46.0	42.0	35.0	35.0
Portugal	51.2/44.0	51.2/44.0	39.6	39.6
Spain	33.0	33.0	35.0	35.0
Sweden	40.0	52.0	30.0	30.0
United Kingdom	52.0	40.0	34.0	33.0
EU average	45.8	47.3	40.8	41.1
Standard deviation	8.6	7.3	7.1	7.8

Notes: Where two tax rates are given, the former reflects the tax rate on retentions, the latter the tax rate on distributions. Average and standard deviation are calculated on the basis of retained profits, excluding the new member states Austria and Sweden. No data available for Finland.
Sources: OECD (1992a) and author's calculations; see also Owens (1993).

1992, and 1994 (i.e., EU citizens moving into EU member states) are about 0.2% in terms of total EU population and thus one tenth to one fifteenth of the respective mobility rates in the United States (reported in Table 1.7).[4] It seems that returns of citizens to their home country and immigration into EU countries from outside the EU are more important than intra-EU mobility. About 50% of immigrants to Denmark, Greece, Spain, Ireland and the United Kingdom are of the respective country's own nationality. The number of Germans immigrating into Germany is also very high, though it is outnumbered by the even larger share of *Aussiedler* (native Germans) coming from Eastern Europe (Eurostat 1995c).

errors. Some countries provide no data on migration at all or only on foreigners or the labor force. This should be kept in mind when interpreting the calculated figure.

[4] When comparing the figures of the United States and the EU, please note the following. The EU mobility rate refers to the citizenship – that is, EU migrants into an EU member state do not have to come from another EU-member state but can also be EU nationals coming from abroad. In contrast, the U.S. figure indicates the mobility of the U.S. population independent of their nationality. Thus, the rates are truly comparable only if we assume that the largest share of U.S. movers are Americans and that most EU movers come from another member state.

Table 1.4. *Current expenditures on social security in EU member states as percentage of GDP*

	1970	1980	1990	1991	1992	1993	1994
Austria					28.2		30.2
Belgium	18.7	28.0	27.0	27.4	27.0	27.6	27.0
Denmark	19.6	28.7	29.8	31.0	32.0	33.2	33.7
Finland					35.4		34.8
France	18.9	25.4	27.7	28.4	29.2	30.9	30.5
Germany	21.5	28.8	26.9	28.8	30.1	31.0	30.8
Greece	7.6	9.7	16.1	15.7	16.3	16.3	16.0
Ireland	13.7	20.6	19.5	20.6	21.3	21.4	21.1
Italy	14.4	19.4	24.1	24.6	25.7	25.8	25.3
Luxembourg	15.6	26.5	22.1	23.3	23.5	24.9	24.9
Netherlands	19.6	30.1	32.2	32.4	33.0	33.6	32.3
Portugal	9.1	12.9	15.0	17.1	17.8	18.3	19.5
Spain	10.0	18.2	20.6	21.7	22.9	24.0	23.6
Sweden					40.0		
United Kingdom	14.3	21.5	22.7	25.3	27.0	27.8	28.1
EU average	17.4	24.5	25.4	26.6	27.8	28.4	28.2

Note: Figures for Austria, Finland and Sweden not included in calculating EU average.
Sources: Statistisches Bundesamt (1994, 1996), World Bank (1994), Eurostat (1995b, 1997b), author's calculations.

Straubhaar and Zimmermann (1993) report that a stock of about 13.4 million foreigners lived in the EU countries in 1989, which is a share of 4%. However, of these 13.4 million, 8.2 million came from outside of the EU (see also Zimmermann 1995). This could be attributed to income disparities, which are much higher between EU countries and neighboring nonmember states – in Eastern and South Eastern Europe as well as in North Africa – than among member states (see Table 1.1 and Wellisch and Wildasin 1996a). Take, for example, Turkey as a typical source country of labor migration and Germany as the basic host country of Turkish workers in the EU. For both countries, per-capita GDP at current market prices (in U.S. dollars) differ significantly from each other. In 1970, per-capita GDP was $274 in Turkey and $3.103 in Germany. Corresponding figures for 1990 are $2.679 in Turkey and $24.477 in Germany (United Nations 1976, 1995).

Table 1.4 demonstrates that expenditures on social security did not decrease in the EU between 1970 and 1994 but rather increased. This might be explained by the fact that EU member countries are not forced by mobility of individuals to drop social benefits. Because of low intra-EU mobility, no country fears becoming a welfare magnet. This observation points in the same direction as

Table 1.5. *Top central government marginal personal tax rates on earnings*

	1980	1986	1990	1991	1992
Austria	62	62	50	50	50
Belgium	72	72	55	55	55
Denmark	36.6	45	40	40	40
France	60	65	56.8	56.8	56.8
Germany	56	56	53	54	55
Greece	63	63	50	50	50
Ireland	60	60	53	52	52
Italy	72	62	50	50	50
Luxembourg	57	57	56	51.25	51.25
Netherlands	72	72	60	60	60
Portugal	84.4	61	40	40	40
Spain	56.5	66	56	56	56
Sweden	50	50	20	20	25
United Kingdom	60	60	60	40	40
EU average	62.5	61.6	52.5	50.4	50.5
Standard deviation	11.9	7.3	6.7	6.9	7.0

Notes: Data for the new EU member countries Austria and Sweden are not included in the EU-average and standard deviation calculations but are listed for informational purposes. No data available for Finland.
Sources: OECD (1992b) and author's calculations; see also Owens (1993).

the empirical study of Kirchgässner and Pommerehne (1996). This study shows that even the higher mobility of individuals among the *Kantone* in Switzerland – a country with a regional structure similar to that of the EU and with a population consisting of four different native-speaking groups (German, Italian, French, Raetho-Romanic) – does *not* induce regional governments to decrease the degree of interpersonal redistribution, a basic theoretical result derived in the literature.

Although these figures seem to suggest that mobility of individuals does not play a major role in the EU, there are some reasons to expect that migration will become (and even has already become) an important phenomenon in Europe. *First,* the Treaty on the European Union (Article 48) provides a legal basis for unrestricted migration of EU citizens among member countries. *Second,* different languages in the EU countries are more of an impediment to migration of low-skilled individuals than of high-skilled professionals. This might be why EU countries have reduced marginal personal tax rates on earnings at the top of the income scale, as Table 1.5 documents. The EU average decreased by more than ten percentage points from 1980 to 1992. The standard deviation

Table 1.6. *Divergence of real per-capita income in U.S. regions: Real regional per-capita income relative to U.S. average*

	1900	1990
New England	133.6	120.8
Mideast	138.6	115.8
Great Lakes	106.5	98.3
Plains	97.2	94.2
Southeast	47.9	85.6
Southwest	68.2	87.5
Rocky Mountain	145.2	89.8
Far West	163.3	109.0
United States (total)	100.0	100.0
Standard deviation	42.2	13.2

Notes: Real per-capita income is given in U.S. dollars at the 1982–84 base. Regional classifications according to the Bureau of Economic Analysis.
Sources: Barro and Sala-i-Martin (1995); author's calculations.

also dropped from 1980 through 1990, indicating that top marginal tax rates on earnings moved closer together during these years. From 1990 on, the standard deviation moved around 7, increasing only slightly.

Third, whereas the applications for EU membership by Finland, Sweden, and Austria were accepted rather quickly, that of Turkey has been delayed more or less indefinitely. Of course, many factors are important for decisions about EU membership. However, one fear expressed by existing members is that a full membership for Turkey would induce an uncontrolled influx of low-skilled workers from Turkey, such that countries like Germany would become welfare magnets (cf. the per-capita GDP disparity between these countries discussed previously). This fear might be why – besides its high preference for autonomy – Switzerland has refused to become an EU member state. A similar explanation applies to the Norwegian refusal of a full membership. Both countries, Switzerland and Norway, are at the top of the income scale among European countries and have extended systems of social welfare. *Fourth,* the United States is seen by some economists (Inman and Rubinfeld 1992) as a federal state, which describes the situation of a future fully integrated Europe. It would therefore be fruitful to look at the degree of convergence and mobility among the individual states in the United States.

As in the EU case, but to a far more pronounced extent, real income differences have vanished during the last decades. According to Table 1.6, real

Table 1.7. *Annual geographical mobility rates among the U.S. states for selected periods: Movers within the same state and from a different state as percentage of total population*

Mobility period	Same state	Different state
1949–50	3.0	2.6
1959–60	3.3	3.2
1969–70	3.1	3.6
1980–81	3.4	2.8
1990–91	3.2	2.9
1993–94	3.2	2.6

Source: U.S. Bureau of the Census (1995).

per-capita income in the Southeast was about 48% of the U.S. average in 1900, while incomes in the Far West and New England / Mideast exceeded the national average by more than 60% and 30%, respectively. Although there are still some income differences among states, Table 1.6 shows that these per-capita disparities have almost disappeared during the last 90 years, as can be seen by the enormous decline in the standard deviation.

Because there are no limits to interstate trade in goods or mobility of capital and people, it is not surprising that flows in capital and goods have diminished per-capita income differentials among U.S. states. However, and remarkably, migration seems to contribute far more than in Europe to an equalization of incomes across different regions in the United States. This can be seen by Table 1.7, showing significant annual migration rates among U.S. states. Mobility rates are of approximately the same size for movers within the same state as from a different state. If the development in the United States is taken as some herald of the situation in a more integrated Europe in the next century, migration will be important. Hence, the results derived in the following chapters, which hinge on a high degree of population mobility among regions, become empirically relevant for the EU, too.

1.2 Purpose, Justification, and Limits of the Study

1.2.1 Purpose of the Book

Within a uniform theoretical framework, this book aims to study the economic consequences of fiscal decentralization when the regions of a federal state are connected by a high degree of mobility. However, the study does not intend to consider all areas of government activities. Following Musgrave's (1959) division of government functions into three parts, the following analysis concentrates on the allocative and distributive branch of the government and leaves the stabilization function out of consideration.[5] The exclusion of the stabilization function in this book is not made because stabilization is unimportant. The idea is rather to appropriate the gains of a scientific division of labor by specializing on the first two functions. Furthermore, the analysis concentrates on problems of direct taxation. Problems of indirect taxation in a federal state (taxation of consumption, like the harmonization of VAT systems in the EU) are discussed very broadly in the literature and will be ignored in the following.[6] The basic question of the present study thus becomes:

> *Provided that regions are linked by high mobility of individuals and firms, is it possible to rely on a regional responsibility for the allocative and the redistributive branch of the government in order to achieve an efficient allocation of resources and the desired (optimal) distribution of income between poor and rich households?*

Of course, a number of contributions have already studied elements of this question.[7] Hence, a further analysis of these problems must be defended, and it will be justified by the following arguments.

1.2.2 Justification of the Study

First, the present study takes a closer look at the many different and often inconsistent views about the benefits and problems of decentralizing government activities, and it derives the conditions under which they are true.

Advocates of a stronger decentralization argue that the degree of interregional household mobility is a decreasing function of the size of the regions. Because they can emigrate, individuals can force self-serving regional politicians to take their preferences into account (McLure 1986). A high degree of

[5] In doing so, the present study follows the recent textbook literature on public economics. See e.g. Atkinson and Stiglitz (1980), Tresch (1981), Boadway and Wildasin (1984), Stiglitz (1986), Starrett (1988), Richter and Wiegard (1993), and Myles (1995). Oates (1972) analyzes in great detail the question of how to divide the stabilization task among governmental levels. More recent contributions on this problem are von Hagen (1992) and Eichengreen (1993).

[6] See e.g. Wiegard (1980), Berglas (1981), Keen (1983), Mintz and Tulkens (1986), Keen (1987, 1989), Crombrugghe and Tulkens (1990), Sinn (1990), Haufler (1993), Lockwood (1993), Smith (1993), Keen and Lahiri (1994), Lockwood, de Meza, and Myles (1994a,b), Keen and Smith (1996), and Richter (1999).

[7] An important monograph studying this problem is Oates (1972); Wildasin (1986) provides a comprehensive survey on many of the issues involved. Further interesting surveys can be found in McLure (1986), Rubinfeld (1987), Wildasin (1987), and Sinn (1994).