RETHINKING SUBSIDIARITY IN THE EU: ECONOMIC PRINCIPLES

1. Introduction

The European Union (EU) is currently facing major challenges, since the enlargement to East Central European and some other countries necessitates considerable changes in the structure of decision making and the operation of the union. The establishment of the Economic and Monetary Union (EMU) and the introduction of the euro as the common currency in EMU countries testify to a stride towards deeper political integration. These developments suggest that a reconsideration of the principles of public decision making is timely, and they have led to the establishment of the European Convention, which will submit its proposals to the European Council sometime in 2003. The tasks of the Convention concern the division of competence between member states and the Union, better definitions of tasks for EU institutions, coherence and efficiency of EU external action and democratic legitimacy of the Union.[1]

The current times provide a good opportunity to reconsider the public governance and organisation of economic activities within the EU. The key question is how decision-making for public sector activities should be distributed among different levels of government. The EU is only one layer of government and there are other levels of decision-making for public sector activities, including the national and local governments in all EU member countries. Some EU countries have an explicit federalist structure, so that their governments have local, state and national levels of public decision making. The non-federalist countries, for example Finland and Sweden, have also some intermediate levels of public administration, but these bodies do not have any legislative power.

The principle of subsidiarity is one of the key concepts in political decision-making in the EU. This principle stipulates that public sector decisions and problem solutions should be kept at the lowest layer of government that is appropriate for that specific task. However, the assessment of what is appropriate must be specified by reference to further principles developed in the theory of fiscal federalism, such as international policy spillovers and international public goods (see Oates, 1972 and Shah, 1994 for a general discussion of this theme). Subsidiarity is a widely debated and even disputed concept (see, for example, Bermann, 1994; Begg et al. 1993 and Alesina, Angeloni and Schuknecht, 2002 and the references therein).[2] Subsidiarity raises several questions. First, is it possible to provide more concrete and operational content or guidelines to implementation of subsidiarity for specific public sector activities? Second, if this more precise content of subsidiarity can be found, how well is the EU currently matching these guidelines? Third, what might be the directions for the EU to take in order to improve its operation?

This chapter considers these questions from the perspective provided by economic analysis. Since the EU is to a large extent an economic union, an analysis of the concept of subsidiarity from the economic viewpoint can provide useful input to the current discussion about the Constitution of the EU and the future course of the development of the EU. We will argue that here are useful economic principles for assessing the application of subsidiarity in specific governmental activities.[3]

2. Economic principles for subsidiarity

Consider a group of countries which have formed an economic and political union in which there is a union level of government besides the national (and possibly lower level) governments in each country. The formation of an economic union implies the existence of important economic activities and policies that provide important benefits to the members of the union. The single market is probably the most fundamental economic factor in an economic union (see, for example, Weingast, 1994; Tabellini, 2002). Economic theory suggests that significant benefits can accrue from free trade in goods and from free movement of economic resources among countries.

[1] See http://european-convention.eu.int for further information.

[2] Devolution of the tasks of the federal government is in some respects an analogous debate in the United States (see, for example, Inman and Rubinfeld, 1997 and the discussion by Musgrave, 1997; Donahue, 1997 and Qian and Weingast, 1997).

[3] The chapter focuses on different government tasks. We will not discuss the economic analysis of the formal structure of political. See, for example, Baldwin et al. (2000, 2001) and Leech (2002) for the latter.

An economic union yields free trade and mobility only within its jurisdiction and not necessarily globally, but regional free trade areas are usually viewed as beneficial.[4] Since global free trade and mobility are extremely hard to come by through negotiations, regional integration may provide a way for reaping some of the benefits and it may also lead to further global integration in the future. A strong regional union can also provide impetus to the process toward global free trade, though this need not always be the case. Regional unions are only second best solutions, since they can lead to trade diversion rather than the creation of new trade. Trade diversion is evident in agriculture as a result of the EU Common Agricultural Policy, as witnessed for example by the very high food prices in the EU (Corsetti et al. 2002, Table 7.1).

Box 3.1

Heterogeneity and inefficiency of uniform decisions

To illustrate the significance of heterogeneity consider a public good, say a cultural activity, which has the characteristic that citizens of a country or region consume it jointly. In this case we can speak of total or marginal value of the public activity. Consider the following example: Suppose that for the citizens of country A any amount X_A of a public activity has a marginal value $6-X_A$ to them and that the marginal cost of production is 2. The efficient level of provision X_A to citizens of country A is $X_A=4$. Suppose also that, if the citizens of country B choose any amount X_B of the same activity that has a marginal value, say $(1/2)(6-X_B)$ to them. Note that, at each level of supply, the citizens of country B value the public activity less than those of country A. The marginal cost of production is assumed to be the same as in country A. For country B the efficient amount of supply is $X_B=2$, that is half of the efficient amount for country A. Any uniform supply of the public good decided by a union level government, for example the mid-point $X=3$, is inefficient. This level is too low for the citizens of country A and too high for the citizens of country B. In other words, a uniform centralised decision about the level of public activity does not respect the preferences of the citizens in the two member countries. It would be better to leave the decision about this activity to each country, as the two countries would presumably choose the efficient levels 4 and 2 of output.

These considerations suggest that protection of the single market with internal free trade and factor mobility and the enhancement of global free trade constitute the single most important economic function of an economic union. By itself, the single market and common trade policy provide a reason for the centralisation of specific economic interventions. The protection of the single market can be in conflict with the notion of subsidiarity that, in contrast, suggests the greatest possible decentralisation of public sector economic activities. Are there economic principles that can provide justifications for the decentralisation of public sector activities?

From an economic point of view, the notion of subsidiarity is largely the question of allocating public sector tasks among the different levels of government. Centralisation versus decentralisation of public sector tasks raises many different issues and the choice is not a routine matter. Centralisation of decision making can, in principle, provide savings of administrative costs, and problems of co-ordination of decisions and activities among the different levels of government can also be minimised. However, centralisation can also lead to rigid governance that, in turn, implies inefficiency when there is significant heterogeneity between countries in terms of the preferences of the citizens and also in terms of the costs and productivity of public activities. If centralised public sector decisions are uniform across the different member countries, as they tend to be in practice, they may bring about considerable losses of efficiency because they artificially enforce homogeneity on heterogeneous countries. Box 3.1 illustrates potential inefficiencies arising from rigid centralised decisions.[5]

It may also be true that bureaucracy increases in line with more centralised public sector governance, leading, for example, to excessive delays in decision making. The current EU is often criticised in this respect. Centralisation of public sector decisions can also lead to problems of accountability of political decision-makers. A centralised government structure means that the citizens are further apart from the decision-makers than if public decisions are carried out in a more decentralised structure. Accountability would seem to favour decentralisation of public decision making.

The preceding considerations confirm that subsidiarity, that is decentralisation of public sector

[4] Baldwin and Venables (1995) review the empirical evidence on the benefits from regional integration agreements.

[5] With heterogeneity, efficiency requires differentiation of benefits and costs between citizens or regions and this is often difficult to achieve in practice.

decision making, should be favoured as a basic principle. However, there are economic activities in which centralised governance can bring forth benefits in terms of improved efficiency and equity among citizens. Tax systems are a case in point. Decentralised taxation in a federation of countries can lead to serious biases that, in turn, result in inefficiencies and inequities. In general, economic analysis suggests a number of reasons for centralising the governance of some public activities and decentralising others. There is no simple or uniform answer to the question of centralisation versus decentralisation of public sector decisions. The answer depends on the nature of the economic activity under scrutiny. This chapter examines a number of economic activities more closely and discusses criteria for deciding when to apply the principle of subsidiarity.

2.1 Public goods, externalities and spillovers

Public goods are commodities or activities in which the benefits accrue jointly to the inhabitants of an area or jurisdiction. Consumption or use of the good by one economic agent (consumer or firm) in the jurisdiction does not reduce the amount available to other economic agents in the area or jurisdiction. Public goods are goods that are jointly consumed, and the consumption of the goods by individuals is non-rival.[6] The costs of provision of such goods are then to be shared among the inhabitants of the area or jurisdiction. National defence, works of art in public places and the preservation of the cultural heritage are standard examples of such public goods.

The benefits from a public good are geographically limited in most cases. However, if the public good character of an activity extends beyond the nation state, then it is efficient to make decisions about its provision, including the sharing of costs, at a higher level of government. The appropriate level can even be the supra-national European (or even global) level. If the beneficiaries of the public good make the decisions about the level of provision and payment of the production costs of the good, then efficiency can be achieved. Suppose that the decisions about the provision of the public good are made in a smaller area and thus by a smaller group than the geographical distribution of benefits would dictate. If this is the case, then some benefits from the good and some potential contributors to its costs are not taken into consideration and the outcome is usually inefficiently low provision. Generally, public goods are provided most efficiently by a jurisdiction that has control over the minimum geographic area that would internalise the benefits and costs of its provision, as suggested by Oates (1972, p. 55).

There are probably not that many goods or activities for which the public good character or non-excludability of that activity extends well beyond national jurisdictions.[7] Countries and political unions of countries are different as the former is likely to be the natural jurisdiction for more public goods than the latter. We will come back to this case and the examples later when we discuss the activities of the EU.

In addition to union level public goods, there are other forms of economic activity where public involvement in appropriate ways can be justified. Generally speaking, this occurs when economic activity by some economic agent generates significant externalities or spillovers on other agents in the sense that the latter get unpaid benefits or incur unaccounted costs from this activity. If these externalities or spillovers extend well beyond the national jurisdictional borders, then involvement of union level public administration can be justified from the efficiency viewpoint.

It is easy to think of examples of externalities and spillovers. An important case is communication networks. The benefits from membership in a network to any single agent typically depend on the size of the network. Any particular method of communication is not useful to somebody if he cannot contact many other relevant people through it. Establishment of a common standard is often important for networks. Competition between, say different communication technologies, can be wasteful since the establishment of a network often involves significant investments. Competing standards can lead to wasteful investments; one of the duplicate investments in related technologies is often redundant. Moreover, economies of scale in production can possibly be achieved through the adoption of a common technology or standard.

[6] For private goods the consumed or used amount of the good by any economic agent is not available to other agents.

[7] For many public goods the minimum geographic area of benefits and costs is smaller than a nation or state. In these cases, lower levels of jurisdictions should provide the goods.

Public decision making can play an important role in the setting of a common standard and, for cases of networks or standards that naturally extend beyond national boundaries, the appropriate level of governmental decisions will be the union level. Economies of scale and benefits from common standards may also exist in public sector activities. If these are obtainable by joint decisions beyond national jurisdictions, then union level decision making is potentially justifiable on the basis of efficiency considerations.

The general lesson from the preceding discussion is that the appropriate level of government intervention – global, union, national, regional or local – depends on the nature of the economic activity. This must be assessed case by case, and there are few general rules about the most appropriate level of governmental action. Moreover, in practice compromises must be made since the geographical dispersion of benefits for public goods and spillovers need not follow the geographical boundaries of the EU. It might also be impractical to have too many levels that are geared just to decisions about specific public goods or spillovers. Administrative efficiency must also be taken into consideration.

It is important to point out that, even if a particular good is a public good, its provision need not always be handled by a government agency. The forms of government intervention, be it at union, national or local level, can vary a great deal from case to case. The forms of intervention can range from common regulation to the provision of the good or activity through public funds and agencies.

It must also be emphasised that governmental decision-making covers much more than the provision of physical goods and services. For example, ensuring a stable financial system for the operation of a single market is an activity in which externalities are not very tangible but nevertheless important. As discussed in Chapter 4, financial regulation is basically a union level activity for the EU. Another example that respects subsidiarity is the establishment of national fiscal councils which is suggested in Chapter 2. The notion of a single market for the EU has many dimensions and, as a common goal, implies different types of decisions and activities. The question of subsidiarity can be raised with respect to many different types of public activity, including taxes and subsidies, redistribution and the welfare state, labour market standards, regulatory standards for industry and competition, environmental standards and so on We will analyse subsidiarity in relation to different types of activity further in Section 4.

2.2 Politico-economic aspects

The above discussion about the allocation of tasks to different levels of government has been conducted from the basic viewpoint of economic efficiency. Subsidiarity can, however, also be considered from a different economic viewpoint that combines the functioning of the political and economic systems. This is the so-called political economy approach.

Competition between jurisdictions

One strand in the political economy approach emphasises competition between national jurisdictions. It is often argued that intergovernmental or "systems" competition can involve a "race to the bottom" where, in terms of economic efficiency, too low levels of public goods or activities are provided. A well-known example is tax competition. It is suggested that, in order to attract more capital and investment, countries compete by lowering their taxes on capital to zero, since capital is internationally mobile and would move to the country with lowest taxation. Labour is also potentially mobile and can possibly move in search of the highest net social benefits.[8]

A counterpart to tax competition is subsidy competition for particular industries. Shipbuilding provides a current example. Various governments in the world subsidise shipyards, and even within the EU it has been very difficult to abolish these subsidies. This seems in part to be caused by subsidisation of the activity in other countries outside the EU. These subsidies run seriously counter to the key principle for the EU, the protection of the single market in which the competitive conditions for different firms should be uniform.

The creation of unequal terms for competition within the single market caused by public subsidies by national governments is a risk that is potentially present in various activities. One case is the possible reintroduction of the national subsidisation of

[8] A recent OECD study (1998) discusses tax competition and ways for managing its possible harms.

agriculture that has been suggested in current discussions of agricultural reform in the EU. Natural conditions for agriculture differ among countries, but this is not a cause for concern. On the contrary, this is an instance of comparative advantage, the existence of which is the key basis for benefits from free international trade.

More generally, national regulatory systems can lead to "systems competition", in which different regulatory standards can result in important externalities between countries and/or industries. However, in some cases systems competition can lead to more efficient government decisions. Solutions to these kinds of systems competition need to be worked out case by case, as discussed by Sinn (2003). It should also be noted that the arguments about intergovernmental competition and the "race to the bottom" or "race to the top" are not easy to assess empirically. There is clear evidence that, for example, corporate taxes have fallen and labour taxes have risen in many countries during the 1990s after liberalisation of capital movements (see Sorensen, 2000; Wildasin, 2000; Sinn 2003 and Devereux, Lockwood and Redoano, 2002). Nevertheless, the evidence on the mobility of productive resources across countries and tax competition is far from systematic, and it is not currently clear what the final verdict will be, as has been recently argued for example by Oates (1999) and Bhagwati (2002). It is probable that even within the EU this mobility is less than perfect, and thus the forces driving inter-governmental competition may not always be very strong.

The goals of government

A different view on intergovernmental competition arises from a fundamental tension in government objectives (see Weingast, 1995). On the one hand, a sufficiently strong government is needed to enforce private contracts and to protect the economic rights of private economic agents. These government activities are important for a proper functioning of markets. On the other hand, a government may not be benevolent but instead "Leviathan", aiming to confiscate the wealth of its citizens. Strong governments may be successful in this. Intergovernmental competition for mobile economic resources can provide limits to Leviathan governmental behaviour, though the desirability of the outcome depends on the circumstances, as has been pointed out by Edwards and Keen (1996). Improved accountability in a more decentralised government structure can also provide limits to Leviathan behaviour.

A union of countries or a federalist structure with decentralised governmental decision making can be a vehicle for an efficient system of markets. Three dimensions are pertinent here, according to Weingast (1995) and others. First, decentralised governments should have primary responsibility to regulate the economy unless specific circumstances call for more centralised decision-making. Second, the union of countries has the task of running a common market with no barriers to trade. The good functioning of the single market is the key governmental function at the union level. Third, the low levels of government should face "hard budget constraints" whereby they cannot have access to unlimited credit or the printing of money.[9] These aspects suggest an important role for subsidiarity as a general guideline, from which departures should be considered only for specific activities. Different ways of facilitating the single market are then the main reason for exceptions to the principle of subsidiarity.

For macroeconomic management these three criteria are relatively well in line with the current division of responsibility between the EU and national levels of decision-making. The monetary union with centralised decision-making for monetary policy can be seen as a method both, for promoting the common market in the EU and for preventing soft budget constraints for EMU member countries. The fiscal provisions in both the Maastricht Treaty and the Stability and Growth Pact are a further means for preventing unlimited credit by EMU member countries, even if concerns are occasionally expressed about the restrictive nature of the Pact from the point of view of macroeconomic stabilisation policy (see Chapter 2).

The actual operation of the EU can vitiate the economic principles of subsidiarity versus centralisation. Political bargaining and lobbying can lead to inefficiencies in public decision-making. Decision-making at the EU level is not free from these phenomena. On the other hand, subsidiarity may be exploited by national lobbies, and moving certain decisions to the Union level can provide benefits

[9] State and local governments in the United States frequently borrow for long-lasting capital projects but operate in private credit markets in the funding of this debt (McKinnon, 1997).

to member states. EMU and common monetary policy illustrates this phenomenon; it enhanced the credibility of monetary policy and has ensured low interest rates for some countries (see, for example, Corsetti et al. 2002,Figure 4.1).

Overall, the political economy aspects of governmental decisions in a union of countries suggest that the implications of intergovernmental or systems competition must also be assessed for specific functions and activities of the government. These include tax competition, competition in regulatory systems and issues concerning migration and labour. A further controversial subject of subsidiarity in decision-making concerns redistribution. We will take up these topics below.

3. What does the European Union currently do?

The previous section considered the basic economic principles of subsidiarity. It was suggested that the important criterion is the existence of public goods or externality effects with strong geographical dispersion of benefits or costs across a number of EU countries. While we still need to consider further the specific activities in the light of the general principles, it is also important to take a look at what the EU currently does. This will provide a basis for a further discussion of how different types of activities might be placed in the different levels of government.

Here we consider empirically the current EU activities and policies. We look at them from two different angles. First, we take up the traditional approach and consider the structure of EU-level public spending. We compare the structure to that of existing federalist countries, such as the US, Canada, and Germany. This comparison is useful even if the EU is not and is not meant to be a federation, but rather a union of independent countries. This is so because an efficient distribution of tasks among different levels of government does not require the formation of a federation from a legal point of view. Second, we consider the activities and policies of the EU from the point of view of regulation of the economy that does not often lead to significant public spending. This is important since the budget of the EU is far more limited than that of individual federalist or unitary government countries. Focusing only on public spending and revenues would give a misleading picture of EU activities and policies.

3.1 Public spending

The EU budget is shown in Table 3.1. It is evident that EU budgetary spending focuses on very spe-

Table 3.1

EU expenditures by function

Function	1991	1994	1997	2000	2001	2002
Total expenditure in million EUR	55.4	70.0	82.4	89.4	92.6	95.7
EAGGF-Guarantee Section	58.7	53.5	50.1	46.4	47.3	46.5
Structural operations, structural and cohesion funds: financial mechanism, other agricultural and regional operations, transport and fisheries	25.8	30.8	32.3	35.8	34.3	33.8
Training, youth, culture, audio-visual media, information, social dimension and employment	0.7	0.8	0.9	0.8	0.8	0.9
Energy, Euratom nuclear safeguards and environment	0.4	0.2	0.2	0.2	0.2	0.2
Consumer protection, internal market, industry and trans-European networks	0.5	0.7	0.9	1.1	1.2	1.2
Research and technological development	3.2	3.6	3.8	4.0	3.9	3.9
External action	4.0	4.8	5.8	6.1	6.7	7.7
Common foreign and security policy	0.00	0.00	0.04	0.03	0.04	0.04
Guarantees and reserves	2.4	0.5	0.5	0.2	0.2	0.4
Administrative expenditure of the Commission	3.0	3.5	3.4	3.4	3.5	3.5
Administrative expenditures (of all other institutions = Parliament, Council, Court of Justice, Court of Auditors, Economic and Social Committee, Committe of the Regions, European Ombudsman, European Data Protection Supervisor)	1.7	1.7	1.8	1.8	1.8	1.9
Total	100	100	100	100	100	100

Source: Eurostat, Statistisches Jahrbuch für das Ausland, Statistisches Bundesamt 2001, Amtsblatt der Europäischen Gemeinschaften; Rechtsvorschriften, Haushaltspläne, Amt für Amtliche Veröffentlichungen der Europäischen Gemeinschaften 1991–L30; 1994–L34, 1996–L22; 1997–L44; 1998–L44; 1999–L39; 2000–L40; 2001–L56; 2002–L2.

Table 3.2

Central, state and local government expenditures by function in % of total expenditure – 1996

	Germany			Spain			Australia			USA		
	central	state	local	central	state	local	central	state	local	central	state	local
1. Total Expenditure	59.6	24.1	16.2	69.0	19.3	11.7	58.8	36.9	5.1*	52.6	25.9	21.5
2. General Public Services	38.1	33.5	28.4	46.8	14.8	38.5	48.7	42.3	9.1*	68.2	12.4	19.4
3. Defense	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
4. Public Order & Safety	7.6	71.7	20.7	60.6	12.8	26.5	15.1	81.6	3.4*	16.6	28.1	55.3
5. Education	4.2	68.4	27.4	30.8	63.0	6.2	29.4	70.5	0.1*	5.2	43.3	51.5
6. Health	72.4	12.5	15.1	36.7	60.4	2.9	53.3	46.0	0.7*	56.7	33.0	10.3
7. Social Security & Welfare	78.6	10.9	10.5	94.3	3.7	2.0	91.2	7.4	1.4*	70.5	21.2	8.3
8. Housing & Commun. Amen.	7.4	26.4	66.2	7.6	18.3	74.1	23.9	44.2	31.9*	70.3	9.4	20.3
9. Recr., Cultr., Relig. Affrs.	4.4	32.9	62.7	21.4	26.9	51.7	26.4	37.1	36.5*	17.3	11.4	71.3
10. Econ. Affairs & Services (11–15)	46.1	35.5	18.4	49.8	29.6	20.6	38.3	47.1	14.6*	42.9	36.2	20.9
11. Fuel & Energy	36.1	52.6	11.3	91.6	7.2	1.2	66.1	33.9	0.0	97.9	2.1	0.0
12. Agric., Forestry, Fishing, Hunt	15.1	75.1	9.8	31.8	60.2	8.0	49.9	49.5	0.6*	48.3	40.8	11.0
13. Mining, Manufac. & Construc.	93.9	6.1	0.0	47.4	46.1	6.6	43.5	40.4	16.0*	100.0	0.0	0.0
14. Transportation & Comm.	43.4	33.3	23.3	49.6	19.5	31.0	17.1	58.6	24.4*	27.8	44.7	27.5
15. Oth. Econ. Affairs & Serv.	50.0	30.8	19.2	60.5	24.4	15.2	66.4	27.0	6.6*	66.4	25.1	8.6
16. Other Expenditures	63.1	31.1	5.8	84.5	6.9	8.6	77.9	19.7	2.3	62.9	18.5	18.6
of which Interest Payments	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0

*: From 1996 onward all government data are compiled on a year ending June 30.

Source: Government Finance Statistics Yearbook 2002, IMF; calculations by the Ifo Institute.

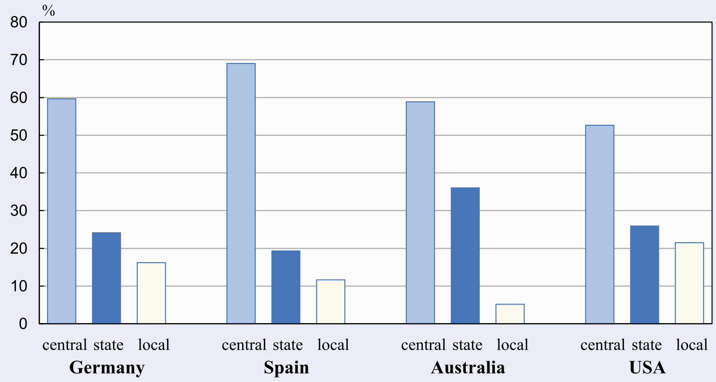
cific tasks. Moreover, these tasks are quite surprising when they are compared to what economic principles would suggest. Even today, nearly half of the EU budget is devoted to agricultural subsidies and guarantees, even though the share has decreased during the 1990s. For 2002, the share is 46.5 percent, down from 58.5 percent in 1991. Structural funds and operations are the second largest item in the EU budget, with its share at approximately 34 percent in 2002. These two main items are largely redistributive in nature and, as discussed below, it is far from obvious that they should be the responsibility of the EU level of government. The remaining important items are external action, that is policies towards non-EU countries (for example development aid and pre-accession strategy) and international operations with a budget share of 7.7 percent in 2002, research and technological development with a share of 3.9 percent and administration with a budget share of 5.4 percent in 2002. EU spending on research and technological development can to an extent be viewed as a natural EU-level spending item. However, this is so only as long as the expenditure is an attempt to correct for externalities in research, as will be discussed below.

The EU budget is quite small in comparison with the government budgets of the member countries as illustrated by the following comparisons. In the period 1996–2000 the EU budget was only 2.4 percent of the total of government budgets of the EU member countries. In 2000, the EU budget was only 1.1 percent of joint EU gross domestic product whereas the share of national budgets of EU member countries in GDP was 46.8 percent.

The structure of the EU budget can be contrasted with the division of public expenditure between national, state and local government budgets. Figure 3.1 shows this division for some federal states. Public expenditures are spread widely across different activities ranging from key public

Figure 3.1

PUBLIC EXPENDITURE OF COUNTRY, STATE AND LOCAL GOVERNMENTS IN SELECTED FEDERALIST NATIONS IN 1996



Source: IMF, Government Financial Statistics Yearbook 2002, own calculations.

services, education and health, social security and welfare to a number of other sectoral activities. There are notable differences in public expenditures among the different levels of government in the federalist countries, as shown in Table 3.2. For example, public safety is a federal matter in Spain whereas it is more the responsibility of the state or local government in the other countries shown. Another example is education, which is a state responsibility in Germany and a shared task in other countries. In general, for each function, the division of responsibilities between the three levels of government shows significant variability, such that federal countries do not present a unified picture in this respect. A very important observation is that the federal government accounts for a relatively high share of total public spending. This share ranges from about 52 to 69 percent in the countries shown in Figure 3.1. This is in marked contrast to the EU budget.

3.2 Regulatory activities and policies

The regulatory instruments of EU policies can be divided into Treaties, Secondary Legislation and Other Acts. Treaties are negotiated at Intergovernmental Conferences to be ratified by all member countries. Treaties are the ultimate source of mandate and legitimacy for all EU institutions and their legislative and judicial authority.

Treaties are sometimes very general and at other times specific, so that much of the governance by the EU is based on secondary legislation and other acts. Binding legal acts are divided into: (i) Regulations that are directly applicable without national implementation, (ii) Directives that are binding but require national implementation and (iii) Decisions that bind all the parties concerned. In addition, the EU Commission issues a number of softer non-binding documents. White Papers, signalling legislative strategies, are an example of such documents. Besides the activity that is legislative in nature, the European Court of Justice has a key role as it both interprets EU Law and seeks its application and enforcement. Finally, international agreements negotiated by the EU are a further form of EU activity that affects its member states.[10]

The legislative activity of the EU has grown significantly over the years, as is indicated by Table 3.3 (see Alesina et al. 2002 and Pollack, 2000 for further discussions). The table reports the number of EU legal acts (Directives, Regulations and Decisions), EU Court Decisions, international agreements and non-binding documents for five year periods. There has been a very rapid growth in the regulatory activities of the EU, while the expenditure share has risen only very slightly (see Table 3.1). This indicates that a very significant part of EU intervention has the form of regulation rather than direct spending.

The data in Table 3.3 provide information only on the total number of activities and policies of the EU and is, of course, limited in three important respects. First, pure numbers do not indicate the importance of specific regulatory acts or public expenditures. Second, the legal acts reported are not good indicators of the acts that were actually implemented. Many directives have not been implemented in national laws and, what is worse, some countries have an extremely poor record in terms of enforcing the laws and directives. Third, the data have not been classified according to the functions that might or might not properly belong to the domain of the EU as discussed above. This limitation is difficult to overcome, but fortunately a recent study by Alesina, Angeloni and Schuknecht (2002) has considered the activities and policies of the EU from the viewpoint of economic functions.

Table 3.3

EU activities; 1971 – 2000

	1971–1975	1976–1980	1981–1985	1986–1990	1991–1995	1996–2000
Directives	108	264	330	537	566	532
Regulations	1,788	4,022	6,106	9,124	7,752	5,583
Decisions	716	2,122	2,591	3,251	4,242	5,299
Total "domestic" legal acts	2,612	6,408	9,027	12,912	12,560	11,414
Court decisions	693	1,155	1,760	2,127	2,027	2,487
International Agreements	454	488	517	542	852	1,223
Recommendations and Opinions	68	114	95	143	1,246	1,505
White and Green Papers	0	0	1	9	28	37

Source: Alesina, Angeloni, Schuknecht (2001).

[10] Another important EU activity nowadays is the European Central Bank, which is responsible for the EU activities in the sphere of monetary policy. We will not consider the ECB activities.

We will next describe the regulatory activities of the EU using this study.

Alesina, Angeloni and Schuknecht (2002) divide the functions of the EU into policy domains as follows:

(1) International trade: the creation of the common market and external trade policy;
(2) Common Market: free mobility of goods, services, capital and people;
(3) Money and finance;
(4) Education, research and culture;
(5) Environment;
(6) Sectoral business relationships: agriculture (and fishing), industry (including energy) and transport;
(7) Non-sectoral business relations: laws, market competition and state subsidies;
(8) International relations: defence and foreign policy;
(9) Citizen and social protection: home affairs, justice, consumer protection, civil rights, health, labour relations and so on.[11]

This categorisation reflects only partially the basic duties of the EU as outlined in Section 2 and below in Sections 4–7. Categories (1) and (2) include primary functions of the EU and for most of them the allocation of the tasks to the EU level of governance is largely evident.[12] In category (3) monetary policy has been delegated to the European Central Bank, a EU level institution, but the "lender of last resort" functions have been left to national authorities. In contrast, the appropriate level of public decision-making on fiscal policy is far from obvious and is currently a hotly debated issue, as discussed in Chapter 2 . In categories (4) and (5) there are clearly variations, as some particular issues can be naturally conceived to be governed at the EU level, while others are mostly national or even local. In category (6) agriculture is the oldest, most active but very controversial area of EU policy. By the criteria in this chapter it is not a clear EU level task. In contrast, some other sector policies in (6) may provide public goods or spillovers. Category (7) contains both natural EU level activities (for example competition policy), but state aids and subsidies can also be counterproductive, possibly undermining the single market programme. Finally, category (9) contains both policy domains with clear supra-national aspects (such as migration and

[11] The Social Cohesion chapter and attached social, structural and regional funds are included here.
[12] It should be noted though that (2) includes some regulatory issues, whose conclusion is not obvious.

Table 3.4
Breakdown of EU legislation by policy domain: number of regulations, directives and decisions

	1971–1975	1976–1980	1981–1985	1986–1990	1991–1995	1996–2000
1 International trade	864	2,573	2,208	3,416	2,783	2,041
2 Common market	133	251	184	268	305	529
3 Money and finance	49	69	98	65	100	249
4 Education, research, culture	15	40	73	104	180	136
5 Environment	29	61	98	131	197	255
6 Business relation, sectoral	1,155	3,051	5,685	7,281	7,130	5,437
6a Agriculture and fishery	980	2,479	5,165	6,880	6,654	4,907
6b Industry and energy	109	445	408	300	309	370
6c Transport	66	127	112	101	167	160
7 Business non sectoral (compet./subs./company law)	116	137	256	358	669	1,406
8 Intl. relations & foreign aid (excl. intl. trade)	155	100	162	768	426	501
9 Citizens and social protection	96	126	263	521	770	860
Total	2,612	6,408	9,027	12,912	12,560	11,414
	Shares (% of column)					
1 International trade	33.1	40.2	24.5	26.5	22.2	17.9
2 Common market	5.1	3.9	2.0	2.1	2.4	4.6
3 Money and finance	1.9	1.1	1.1	0.5	0.8	2.2
4 Education, research, culture	0.6	0.6	0.8	0.8	1.4	1.2
5 Environment	1.1	1.0	1.1	1.0	1.6	2.2
6 Business relation, sectoral	44.2	47.6	63.0	56.4	56.8	47.6
6a Agriculture and fishery	37.5	38.7	57,2	53.3	53.0	43.0
6b Industry and energy	4.2	6.9	4.5	2.3	2.5	3.2
6c Transport	2.5	2.0	1.2	0.8	1.3	1.4
7 Business non sectoral (compet./subs./company law)	4.4	2.1	2.8	2.8	5.3	12.3
8 Intl. relations & foreign aid (excl. intl. trade)	5.9	1.6	1.8	5.9	3.4	4.4
9 Citizens and social protection	3.7	2.0	2.9	4.0	6.1	7.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Alesina, Angeloni, Schuknecht (2001).

Table 3.5

Breakdown of EU non-binding acts by policy domain

	White Papers			Green Papers		
	1971–1980	1981–1990	1991–2000	1971–1980	1981–1990	1991–2000
1 International trade						1
2 Common market		2	1		4	11
3 Money and finance			2			1
4 Education, research, culture			1			5
5 Environment			1		1	5
6 Business relation, sectoral			4		1	8
6a Agriculture and fishery					1	
6b Industry and energy			1			4
6c Transport			3			4
7 Business non sectoral (compet./subs./company law)			1		2	7
8 Intl. relations & foreign aid (excl. intl. trade)			1			1
9 Citizens and social protection			3			12
Total	0	2	14	0	8	51
	Shares (% of column)					
1 International trade		0.0	0.0		0.0	2
2 Common market		100.0	7.1		50.0	21.6
3 Money and finance		0.0	14.3		0.0	2
4 Education, research, culture		0.0	7.1		0.0	9.8
5 Environment		0.0	7.1		12.5	9.8
6 Business relation, sectoral		0.0	28.6		12.5	15.7
6a Agriculture and fishery		0.0	0.0		12.5	0.0
6b Industry and energy		0.0	7.1		0.0	7.8
6c Transport		0.0	21.4		0.0	7.8
7 Business non sectoral (compet./subs./company law)		0.0	7.1		25.0	13.7
8 Intl. relations & foreign aid (excl. intl. trade)		0.0	7.1		0.0	2
9 Citizens and social protection		0.0	21.4		0.0	23.5
Total	0	100	100	0	100	100

Source: Alesina, Angeloni, Schuknecht (2001).

justice) and others with far less clear EU level governance requirements (such as social protection and structural and regional funds).

Looking at Tables 3.4 and 3.5, it is evident that category (6), Sectoral business relations, constitutes the most active area of EU activities and policies. Moreover, category 6 (agriculture and fishery) is by far the largest subgroup within it. These activities are not obvious areas of EU intervention and we will consider them further below. In the other domains of EU policy, categories (1) and (2) International trade and the Single Market are sizeable and quite naturally so since they concern the key EU function, the creation and protection of the single market. There is significant growth in the share of some other categories, especially in (9) Citizen and social protection and (7) Non-sectoral business relations. Taken together, the total number of EU legislative and non-binding acts has shown significant growth over the years.

3.3 An assessment

EU activities and policies are regularly assessed by the citizens of its member countries in the opinion survey conducted annually by the Eurobarometer .

Table 3.6 reports the average results for the EU as a whole from the latest survey.[13] Table 3.7 reports the country-specific results as deviations from the corresponding EU average in Table 3.6. The two columns for the EU in both tables describe, respectively, the percentages of people favouring either decision making at national government level, marked as 'Nat', or decision making as a shared responsibility of the EU and national government, marked as 'EU'.

Table 3.6 shows that citizens of the EU member countries would clearly like to give a shared role to the EU with national governments in monetary

- and fiscal matters,
- environmental issues,
- international relations (including humanitarian aid, poverty and exploitation of human beings),
- research,
- global crime protection and
- regional aid.

According to the poll, EU activities should not be focused very much on

[13] See Alesina, Angeloni and Schuknecht (2002) for further discussion using earlier data.

Table 3.6

Eurobarometer-Policies: National or EU level decision-making – Results in % of EU average[a)]

	EU 15	
	NAT	EU
Defence	45	51
Environment	33	64
Currency	31	65
Humanitarian aid	24	72
Health and social welfare	59	37
Media	56	38
Poverty/social exclusion	30	67
Unemployment	44	53
Agriculture & Fishing	40	54
Regional aid	32	63
Education	61	36
Research	27	68
Information EU[b)]	20	74
Foreign policy	22	71
Cultural policy	49	44
Immigration	48	49
Political asylum	45	51
Organised crime	25	72
Police	63	34
Justice	58	38
Accepting refugees	43	53
Juvenile crime	51	45
Urban crime	56	40
Drugs	26	71
Exploit. Hum. Beings	16	80
Terrorism	12	85

[a)] Differences between "NAT" and "EU" and 100 is the percentage of don't know. – [b)] Information about the EU, its policies, institutions and bodies.

Source: Eurobarometer Spring 2002, p. B 43, 44, http://www.gesis.org/en/data_service/eurobarometer/index.htm.

- education,
- agriculture and fishery,
- health and social welfare and
- unemployment.

The survey results in Table 3.7 for individual countries indicate some interesting country-specific opinions. First, citizens' opinions in some countries follow the EU average rather closely. Taking (plus or minus) 20 point deviation from the EU as a criterion, it can be seen that opinions in Belgium, Germany, Spain, France, Luxembourg and the Netherlands do not differ radically from the EU average opinion. Second, citizens in the Scandinavian countries show a strong preference for respecting subsidiarity, and this is so especially for foreign policy, humanitarian and social issues, refugee policy, justice and crime. Third, there are some areas for which country opinions do not differ radically from the EU average. These areas are media, poverty, regional aid, education, research, foreign policy, police, drugs, exploitation and terrorism.

The empirical data yield a rather clear total picture. First, in terms of public spending, the EU is quite far from the expenditure patterns of federalist nations. The EU budget share in GDP is quite small – indeed it is much smaller than the corresponding share in federalist countries. Thus the balance of government tasks in the EU is very much geared towards national governments, which accords well with the principle of subsidiarity. The EU is not close to being a federation, even though the non-budgetary interventions of the EU run to some extent counter to this conclusion. Second, the tasks that the EU level public administration is currently undertaking do not accord that well with the opinions of its citizens. Third, the current tasks of the EU do not match very closely the economic principles for decentralisation of public sector responsibilities, which are considered further in Sections 4–6 below.

4. Activities for an economic union: examples and cases

We have seen that, for a number of activities, EU level public intervention can be justifiable for efficiency reasons. We will now discuss key activities for which union level government intervention is clear-cut in our opinion. However, we will also consider some activities that are more controversial in this respect.

4.1 Public goods

Section 2 argued that, for efficiency reasons, there should be Union-level decision making for public goods for which the geographical distribution of benefits extends widely across different nations within the union. The clearest example of public goods with such benefits is probably national defence and foreign policy associated with external security. Strong defence by a country can bring major benefits to friendly neighbouring countries as it enhances their security, for example, against threats against the territory of the former. Significant cost savings exist moreover in compatible weapons systems and common weapons development, exchange of military and security information and a common EU foreign policy diplomatic corps for external security.

The existence of significant public goods aspects in national defence and external security policy are evidently areas where decision-making at the EU level is justifiable from an economic viewpoint.

Table 3.7

Eurobarometer - Policies: National or EU level decision-making - Results in % by country[a)] deviation from EU average)

	B		DK		D		GR		E		F		IRL		I		L		NL		A		P		FIN		S		UK	
	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU
Defence	-10	10	12	-11	-7	6	6	-4	-7	6	3	-3	18	-21	-14	15	-8	7	-11	9	12	-12	16	-19	46	-44	33	-31	13	-13
Environment	2	-1	11	-9	-5	5	-4	6	-7	6	-2	2	10	-13	-6	6	0	-1	-3	3	14	-14	14	-17	25	-23	14	-12	12	-11
Currency	-9	11	14	-13	-5	5	-8	10	-8	7	-4	6	-1	-2	-20	21	-15	16	-11	11	0	1	10	-12	15	-13	14	-14	35	-37
Humanitarian aid	-4	5	13	-10	1	-2	-2	4	-6	6	-4	5	-3	-1	-10	10	5	-5	1	-2	17	-17	9	-11	24	-23	20	-18	6	-8
Health and social welfare	3	-2	23	-21	0	0	-23	25	-7	8	10	-9	-1	-1	-14	13	8	-8	5	-4	9	-8	4	-6	29	-26	30	-27	4	-4
Media	-3	4	18	-15	2	-3	-12	15	-4	3	-1	2	-7	3	-9	8	-8	9	4	-5	10	-9	10	-11	-10	11	19	-15	4	-5
Poverty/social exclusion	3	-3	8	-7	-1	1	-5	6	-7	6	3	-2	1	-4	-9	9	4	-4	12	-13	4	-6	8	-11	17	-17	7	-5	6	-7
Unemployment	0	0	18	-17	-2	1	-14	16	-4	3	1	-1	0	-3	-17	17	10	-11	12	-12	-1	0	6	-8	21	-21	8	-6	14	-15
Agric. & Fishing	-10	12	4	0	-7	6	1	3	-7	7	3	-1	4	-6	-5	3	2	-1	0	1	16	-17	11	-11	33	-29	16	-12	12	-13
Regional aid	-7	9	-3	5	-5	4	-6	9	-7	7	11	-10	-10	7	-1	2	-6	7	-1	0	1	-2	3	-5	7	-5	4	-1	1	-4
Education	8	-8	11	-10	-1	-2	-17	18	-7	6	2	-1	1	-4	-16	15	9	-10	12	-11	5	-5	8	-10	16	-16	7	-6	12	-13
Research	-6	7	5	-3	6	-7	-8	10	-7	6	-3	5	-8	3	-12	13	-14	15	-1	-1	4	-3	9	-11	14	-14	11	-9	8	-8
Information EU[b)]	-4	5	15	-13	-3	2	-2	6	-4	3	1	0	-1	-1	-6	7	-3	3	3	-2	5	-5	21	-22	8	-7	11	-8	4	-7
Foreign policy	-8	9	16	-13	-3	3	2	2	-7	6	0	1	1	-4	-10	10	6	7	-1	2	6	-5	9	-10	10	-10	13	-11	12	-14
Cultural policy	3	-1	31	-28	2	-2	-4	8	-12	12	2	2	10	-11	-12	13	5	-3	10	-10	14	-12	13	-13	13	-12	24	-21	3	-5
Immigration	-10	10	17	-17	8	-9	-15	14	-17	14	-4	4	10	-15	-19	18	4	-6	-10	9	20	-20	9	-13	35	-34	18	-17	17	-17
Political asylum	-9	10	18	-16	9	-8	-14	14	-15	13	-4	4	9	-13	-20	18	-1	0	-7	8	21	-20	8	-11	24	-23	14	-12	16	-16
Organised crime	-7	8	3	-1	-6	6	-4	6	-7	6	-3	3	10	-12	-3	3	-3	2	-7	7	2	-2	6	-8	2	-2	-3	5	20	-20
Police	6	-6	8	-7	-2	0	-12	13	-11	9	-1	1	0	-3	-10	9	2	-3	2	-2	10	-9	8	-10	15	-14	17	-15	13	-12
Justice	2	0	25	-25	3	-3	-8	10	-11	10	1	0	0	-2	-12	12	4	-4	-8	8	14	-13	10	-11	16	-15	17	-16	9	-8
Accepting refugees	-9	9	25	-24	6	-5	-8	9	-11	10	-7	8	17	-20	-18	17	12	-12	-5	5	22	-21	7	-10	39	-37	25	-23	16	-16
Juvenile crime	5	5	22	-20	-3	2	-22	25	-17	16	7	-6	5	-7	-14	14	1	-1	8	-6	-5	5	2	-5	13	-12	20	-17	18	-18
Urban crime	1	1	19	-16	-2	2	-24	26	-13	12	4	-3	-1	-1	-6	6	-3	3	8	-7	-13	14	4	-7	-1	1	14	-11	15	-14
Drugs	-1	2	1	1	-4	3	-4	6	-2	1	-4	4	2	-4	-8	8	12	-12	8	-8	2	-2	11	-13	6	-7	10	8	11	-11
Exploit. Human Beings	-4	5	1	2	-3	3	2	0	-4	0	-1	2	0	-3	-5	6	-1	1	3	-1	4	-3	10	-11	4	-3	4	2	10	-10
Terrorism	-4	5	1	1	-4	0	1	0	0	-1	-1	1	0	-3	-5	5	-4	3	0	0	3	-2	9	-11	3	-2	-2	3	6	-7

[a)] Difference between 'Nat' and 'EU' and 100 is the percentage of don't know. – [b)] Information about the EU, its policies, institutions and bodies.

Source: Eurobarometer Spring 2002, p. B 43, 44; http://www.gesis.org/en/data_service/eurobarometer/index.htm

Efficient provision of these services can nevertheless take a variety of different forms and it need not necessarily be fully centralised in an EU agency even if overall responsibility should rest with EU administrative structures. At the moment the role of the EU is quite limited in national defence and security, since NATO has in effect had this role already for many years. Some EU countries are, however, not members of NATO, and this situation makes the role of the EU fairly complex. In the Eurobarometer opinion survey, defence was not seen as a top priority for EU level action. Evidently, there is major heterogeneity in preferences across citizens of different member countries and the conclusion is less clear-cut than economic considerations suggest (see, however, Persson, Roland and Tabellini, 1998).

Other related goods and services, of which public goods aspects can be geographically widely dispersed within the EU, are internal security and border control, as discussed, for example, by Tabellini (2002). With the Schengen agreement in place, the benefits from joint decision-making about the forms of border control are apparent. Correspondingly, there are potentially large benefits from creating joint mechanisms in internal security such as Europol and close co-operation between national police in the member countries. The importance of joint action in internal security has become apparent after recent terrorist attacks.

Apart from national defence and security policy, it appears that there are relatively few public goods for which the benefits accrue to the EU members jointly. Other public goods, such as those associated with culture, are often national or even more local in character.[14] Provision of cultural services raises difficult conceptual issues. Some forms of culture can be provided through the market system, while other forms seem to require some form of public intervention. It appears that there is little need to have union level decision-making or intervention for local or national public goods and services.

4.2 Externalities and spillovers

Cross-border externalities and spillovers are the other main category for possible governmental decision making and intervention at the EU level. This is the case when benefits and/or costs from externalities and spillovers are widely dispersed across the member states, so that a national jurisdiction (or contracting between a limited number of countries) may not be able to internalise these benefits and costs. Financial markets with interbank cross-border exposures provide an example of an externality which is potentially EU wide. This case will be discussed in Chapter 4. Here we take up other economic activities in which geographically widely dispersed spillovers or externalities can also arise.

Networks

Trans-European networks, for example in transport and in research, are good examples of operational structures that try to reap benefits from spillovers arising as an integral part of the formation of a network. Compatibility of different national parts of a network and free or low-cost use of such networks leads to reductions in operating costs and can bring economic benefits from the existence of a larger number of nodes in the network. Free access to national networks of for example roads and railways for users from different countries is very important for reaping the full potential benefits from these networks.

If investment into and provision of a national network is limited to the country in which the network lies, then risks of under-investment are a real concern if important benefits from the network accrue to users from other countries. Freeways and rail transport network with intensive traffic across national borders by compatible equipment (for example trains) may need to be supported by intergovernmental intervention, possibly at the EU level.[15]

It is, however, important to distinguish clearly between network activities that benefit all EU countries and others that affect only two or a few countries. Investments in telecommunications, for example, belong to the former category, since each country will contact every other country. Road and railway networks, on the other hand, belong to the second category. The border crossing connections will typically help two countries only, and sometimes a third or a fourth country is affected, but

[14] However, a few cultural activities, such as preservation of key monuments of human cultural heritage can be seen as even global public goods.

[15] See, for example, Shah (1994) for a discussion of the principles for the design of such grants.

rarely if ever do they involve a higher number of countries. Thus the EU should not subsidise such connections. The EU could, however, have a useful role in terms of coordinating and facilitating the negotiations between the countries involved and to design common standards for inter-community networks.

Research is an activity that can involve significant externalities. For example, a specific scientific discovery can provide input to additional discoveries. The additional discoveries may well take place in different countries, which indicates that the externalities from research satisfy the requirement of geographically wide dispersion of benefits. In any case, the initial producer usually incurs all of the costs of the discovery but may not be the recipient of the benefits from the additional discoveries. Moreover, cooperation of different researchers can lead to increases in productivity, which suggests that networking by researchers can facilitate research. In these situations the research system may not operate at an efficient level with too little investment in research.

On the other hand, research often contains an element of a race to be the first to find a result which in itself implies overinvestment and unnecessary parallel activities. Moreover, very successful research is carried out by private universities in the United States, which is obviously a decentralised way of organising research. These elements diminish the rationale for EU support and centralised action through grants as a natural vehicle for internalising the benefits and costs of research activity and for achieving productive efficiency in research. This impression is strengthened if account is taken of the fact that, at the moment, the administration of these tasks in the EU is very bureaucratic, involving very long administrative lags and insufficient quality control, which can nullify the benefits from the intervention. Moreover, it seems that current EU rules for research grants imply a bias in the distribution of the available funds in favour of smaller countries, which for natural reasons have more cross-border connections than larger ones. This bias leads to a systematic redistribution at the expense of large countries.

We conclude that trans-border networks and public goods with geographically dispersed beneficiaries are important parts of EU level public infrastructure whose governance can be facilitated if the EU helps the countries involved to coordinate their decisions. However, normally no financial implications should be involved. In some other activities, the spillover or public good aspects can be much less dispersed. If so, centralising the public intervention to the top level of government is not the right answer from the viewpoint of economic efficiency. We next take up a few other examples of spillovers or externalities, in which the EU-dimension in the governance of these activities is even less clear cut.

Environment

Environmental concerns have an international dimension in a number of economic activities. Trans-border pollution provides examples of negative externalities that extend beyond national jurisdictions. When such externalities exist, there is a case for negotiation between the countries concerned. It appears that relatively few environmental externalities specifically have an EU wide geographical dimension. In many cases the externality is much more local and in some cases, such as global warming and climate control, the externality is instead global.

The principle of subsidiarity suggests decentralization of the regulation of environmental externalities that are local, national or a concern to only a few neighbouring countries, though there can be benefits from having the EU set up a common framework for such situations. The regulation appropriate for global warming and any other global externality is an EU level duty. The EU alone is not the sufficiently high level of public decision-making, but it is the natural party in international negotiations to control a global environmental externality.

Ecological dumping as a result of too lax regulation has been raised as a possible concern when independent countries set their own environmental standards. Opinions differ between academic researchers about the consequences of regulatory competition in environmental standards. These differences are in part due to different circumstances about possible environmental damage. If the latter occurs only within the borders of countries and if the profit from being able to freely use the environment accrues to domestic residents only, then national regulation will not lead to ecological dumping (see Long and Siebert, 1991 and Oates and Schwab, 1988). This reinforces the previous observation that geographically limited pollution problems do not require the centralisation of public regulation.

In contrast, the outcome is not clear-cut when there are international spillovers of environmental damage and if foreigners are, to an important degree, owners of polluting firms as is shown in Sinn (2003). The outcome will then very much depend on the type of regulations that are used by the different countries. If international cooperation is required, then a suitably designed system of tradable pollution permits, which last only a limited time and are regularly sold by the governments, can in principle lead to an outcome that internalises the spillovers and externalities. The administration of such a system requires international cooperation, and the principle of subsidiarity does not imply a decentralisation of this activity.

Natural resources

Management of commercial fishing, where EU interventions have been attempted, provides a complicated example, in which the fishing activity by a single fishing unit can exert a negative externality on other fishing units. This is a result of missing property rights in the fish population itself. The latter are an example of a common property resource since in the water the fish migrate across national borders. Such resources can be subject to over-extraction.[16] Any single fishing unit does not take fully into account the effect of its fishing on the fish population since the fishing unit does not own the resource. Over-fishing results when all fishing units behave in this way. This is a clear case in which centralized action is necessary.

Fishing may be contrasted with agriculture, which is a very different type of activity exploiting a natural resource, land. In contrast to fishing, it is easy to define property rights to land and these rights were indeed defined in Europe a very long time ago. The justification for public regulation of fishing does not apply to agriculture, which is a standard form of production and business activity. Thus the common agricultural policy of the EU (CAP) cannot be defended on the basis of a spillover or externality. Traditional landscape and other similar concerns can be seen as a public good, but if so, certainly as one whose benefits accrue primarily to local or national citizens.

Subsidies leading to increased production are not a proper way to take account of such an "aesthetic" public good produced at the national level. On the contrary, such subsidies have led to an overly extensive form of agriculture, which has created substantial environmental damage (for example pollution of ground water with nitrates) and has often contributed to a destruction rather than preservation of the landscape. Support should be geared to the preservation of the landscape itself or environmental improvement and not to agricultural production. These arguments should be kept in mind if the discussed reform of CAP is geared to the introduction of national support to agriculture. National subsidies should not be tied to production or exports but rather to the preservation of the rural way of life if a member country finds national support to be in its interest. Production or export subsidies would also work against a unified single market in which such subsidies would frustrate the forces of comparative advantage and destroy the "level playing field" of the single market. The 2002 Report of the European Economic Advisory Group discusses further a blueprint for reform of the Common Agricultural Policy.

Quotas and markets for licences for the extraction of a common property resource can provide an efficient solution to the problem of over-extraction of fish populations. The management of such schemes requires public sector intervention, and the market for fishing rights should be administered by some public agency. The level of government for the management of fishing rights seems to depend on the geographical area where the fish population resides and to which fishing fleets from different countries have access. It is not obvious that the EU administration is always the appropriate level of public intervention in all cases. Some fish populations are relatively local, though free access of other EU member countries can make management of a local fish population an EU level concern. For some other fish populations a global level would, in principle, be the right level of public intervention. In the latter, the EU can be the right type of public body for international negotiations and contracts for management of common property resources.

[16] See for example Dasgupta (1982), chapter 2, for a good introductory discussion of the "problem of the commons".

To sum up, while there are environmental reasons for common EU policies to regulate fishing, there is no economic reason whatsoever for agricultural policy to be carried out by the EU. The subsidiarity principle dictates that agricultural policy be shifted to national authorities as quickly as possible.

Standardisation and product quality

Provision of a common standard for economic activities can be viewed as a particular type of networking. There are clear benefits from well-chosen standards, since wide usage in different countries can provide benefits to individual users or lead to lower costs of production and information to users. In many activities there is a clear international dimension to standardisation, so that its governance at the EU level can be warranted.

Harmonisation of product quality standards across the member countries can be efficient, since it lowers the cost of gathering and understanding of product information to consumers. Moreover, competition in product quality regulation can lead to too lax product standards, since individual countries can try to minimise production costs for domestic firms. When all countries engage in this race, a non-optimal outcome can result. Thus for many goods and services, common standards and the harmonisation of product quality information across the EU appears to be an efficient level of regulation.

For some commodities, in which for example the use of hazardous substances is possible, product information and safety is a major concern, while for other goods this issue is of little importance. In the former case, it can be necessary to establish Europe-wide standards in which case an EU level supervisory administrator is required. Food and drugs are a case in point.[17] In other cases, private provision of the evaluation activity for standardisation of products and assessment of product quality may be preferable to public provision. Michelin guides for restaurants provide a simple example of private supply of information on product quality for those who prefer the French cuisine. The wide range of cases in product standards indicates that there is no single model of regulation or level of regulatory administration that fits all the different possibilities.

5. Tax and infrastructure competition

The international mobility of some productive factors, especially capital, has widely raised concerns about tax competition and about under-provision of public goods. It is argued that independent countries have strong incentives to reduce tax rates for mobile factors and that this would lead to too low levels of some forms of taxation and too high levels for others.[18] An important related argument is that, in order to attract businesses, independent countries also compete for mobile factors of production by providing excessive public infrastructure for businesses.

These two arguments, low tax rates for mobile capital and excessive public infrastructure to attract businesses, raise a number of different issues and require a closer analysis (see Sinn, 2002, ch. 2 for a clear exposition). A key starting point is the nature of public goods that the public sector needs to finance. One possibility is that the public goods solely benefit wage earners or consumers. In this case tax competition prevails: a tax on the mobile factor is entirely shifted to the immobile factors, the income of the immobile factor is reduced, and the tax revenue from such a tax is insufficient to compensate for the losses of the immobile factor.

In contrast, the outcome is different when the public good is an infrastructure good that benefits the firms: tax rates will not be driven to zero and competition in taxation and infrastructure can yield productive efficiency in both, the international allocation of capital and the provision of public infrastructure. In this last case, concerns may still remain about the financing of the public sector budget, as the revenues from taxing the mobile factor need not be sufficient. A proper resolution to the financing problem is to use a coordinated requirement of full self-finance of infrastructure goods from taxes on the mobile factor by all countries. The EU could, for example, extend its subsidy ban to the case of implicit subsidisation through under-priced infrastructure provision. This would resolve the issue of financing difficulties without

[17] These considerations imply that the EU needs to be concerned with agricultural production, but the EU agricultural responsibilities would then be focused on food safety (see the 2002 EEAG Report for further discussion).

[18] As noted above, there is empirical evidence about tax competition even if the evidence is limited and may not support extreme "race to the bottom" arguments.

necessitating a co-ordination of infrastructure. A difficulty with this solution is that it needs even more extensive monitoring than the present interpretation of the subsidy prohibition.

It should be stressed that tax harmonisation is not a proper remedy for the financing problem, since it intensifies jurisdictional competition by providing strong incentives for excessive investment in public infrastructure. When the tax rates on mobile capital are fixed at the EU level, each single country has an incentive to compete for mobile capital by providing the needed infrastructure, but the amount of infrastructure investment resulting from this competition will be larger than what is efficient from an international perspective. The harmonisation of capital income taxes would require infrastructure harmonisation to prevent this overinvestment effect, but in view of the prevailing economic and geographical divergences among the EU countries, the latter cannot meaningfully be achieved. Alternatively, all taxes would have to be harmonised such that there are no sources of funds for excessive infrastructure investment. All this is hard to imagine for the time being.

Are there any good methods for resolving the financing problem with little international co-ordination? One possible remedy is the residence principle of taxation whereby taxes are levied at the recipient of the income rather than at the source of income. With resident taxation it is not possible to evade taxes by simply transferring the capital to another location. It may, however, be difficult to administer residence taxation, since it requires reporting of income earned abroad. Moreover, tax competition can also ensue through investors shifting residence rather than the location of mobile capital. Another possibility is to design the corporate tax system with zero marginal taxes on new investment but with positive average taxation. Such a system attempts to tax only dividends but not retained earnings, so that investment financed at the margin from retained earnings are tax-free. However, such tax forms entail the difficulty that new investment need not always be tax-free. While retained earnings provide marginal finance for new investment for mature firms, start-ups usually require new equity and dividend taxes raise their cost of capital.

In general, the principle of subsidiarity in the design of the tax system is facing serious difficulties due to the increased mobility of productive factors. Different degrees of mobility lead to both, low taxation and less redistribution among productive factors. With a deepening of integration it is possible that, in addition to capital, labour will also become much more mobile in the long run. If this happens, decentralised taxation by member countries will face increasing difficulties from tax competition and wide-spread erosion of tax bases. A well-functioning central government is an answer to ruinous competition when all key factors of production are fairly mobile.

6. Labour markets, social standards and the welfare state

With the enlargement of the EU, questions about social standards in employment and labour markets and the future of the welfare state, that is redistributive capability of the state have become subject to active discussion. The coming enlargement is different from the earlier ones in a number of respects. First, migration to the existing EU countries has been severely constrained, first by the Iron Curtain and then by western immigration laws, such that the migration pressure will not have been relieved at the time of enlargement. Second, accession countries have, with some exceptions, quite low GDP per capita and low wages relative to the EU average. Currently, monetary wage costs per hour are one fifth to one tenth of those in the richer EU countries. Moreover, social standards in employment and redistribution and welfare benefits offered by these countries are much lower than in the current EU member countries.

These differences imply that there are tensions concerning the welfare state, social standards and the migration of productive factors. The differences in wages and social standards can be the source of potentially large migration flows of productive factors. It is likely that some capital will migrate from the current EU member countries to the accession countries, while the reverse is true for labour. It is difficult to forecast the magnitude of possible migration flows.[19] However, it is impor-

[19] According to an extensive empirical study of the Ifo Institute, 4 percent of the population of the accession countries will migrate to Germany over a period of 15 years if wages converge at an annual rate of 2 percent (Barro-Sala-i-Martin rule). This will imply an emigration of 6 percent to the total of the old EU countries if the current proportions of migration from the eastern countries to Germany and the rest of the EU (two thirds Germany, one thirds rest) remain stable. See Sinn et al. (2001).

tant to understand the nature of the tensions and discuss the appropriate policy responses.

6.1 The welfare state

From a personal ex ante viewpoint, income redistribution and the welfare state are to be seen as insurance systems. They protect those citizens who will experience unfavourable personal circumstances, such as long-term illness or unemployment. The welfare state is a response to these insurance needs[20], and if there is no factor mobility we can think of citizens as contributors to the insurance system and beneficiaries when they encounter hardships.

This kind of closed system no longer works well when there is factor mobility. Mobility can provide a way to enjoy the benefits of the welfare state, while at least partly avoiding the insurance payments. When borders are open and people are mobile, differences in welfare systems can induce migration. People in need of benefits move to the country with relatively high benefit levels, while "healthy and lucky" people (who are net payers to the system) move out of the high benefit and high cost country. With such movements, the funding of an advanced welfare state runs into trouble and there are pressures to reduce both taxes and benefits of the system.

The magnitude of these pressures depends on the degree of factor mobility and is difficult to forecast. There is probably little mobility among the current EU citizens. However, the differential mobility to various western EU countries of people deciding to emigrate from eastern Europe because of the huge current income differentials could be extremely high, implying a high sensitivity of migration to even small differences in living standards among the target countries. One policy response to the pressures resulting from the mobility of people would be to change the current principles of eligibility for welfare benefits. Currently, EU welfare states practice a dichotomous approach to migrants within the EU. People who come to live in another country for reasons other than working there, are usually excluded from welfare benefits of any kind and have to rely on the benefits received from the home country. On the other hand, people who come with the intention to work, are fully included.[21] Thus, a home-country principle applies to non-working migrants and a residence principle applies to working migrants under current EU law.

If the migration-induced pressures on the welfare state stem exclusively from the application of the residence principle, a potential solution could be a strengthening of the home-country principle by applying this principle to at least some of the benefits received by working migrants. Such a reform would reduce artificial migration incentives due to differences in welfare systems, though there would still be migration for normal economic reasons.

Of course, as with all measures discussed in this chapter, such a move would require a substantial reform of the existing EU laws, which might meet with resistance on equity grounds. However, it seems to us that the alternative, which currently is being envisaged by the EU Commission, that immigration will be held in check by quotas and other quantity constraints for many years to come, would be a much more severe infringement on the right of free migration granted in the Treaty of Rome. The Treaty of Rome is not, however, in conflict with a solution which permits every EU citizen who wants to migrate to migrate, but without receiving any gifts.

In practice, the home-country principle is difficult to be fully implemented. The provision of free public goods with benefits geographically accruing to only that country, is naturally funded by taxes from factors actively working in that country. However, it might be possible to try to apply the home-country principle in a limited way, whereby migrants would be immediately entitled to contribution-financed benefits, but only gradually entitled to social benefits that are funded from general tax revenues.[22]

The idea of gradual access to social benefits is designed to minimise the fiscal implications that arise from free mobility and differences in the welfare systems between countries. These implications are difficult to assess, as illustrated, for example, by the case of differences in the skill levels of immi-

[20] In practice also further re-distributive goals as a result of particular ethical viewpoints are stressed in political debates.

[21] Sometimes the criterion for inclusion is actual work rather than intention to work. There may also be special provisions for refugees.

[22] Such a system has recently been recommended by the Scientific Council of the German Ministry of Finance (2001).

grants. Highly skilled workers who have obtained their education in their home country can be a net benefit to the country of immigration. Correspondingly, they represent a cost to their home country. Such a brain drain is sometimes seen as an important policy concern (see Chapter 5 for a discussion of the question of a brain drain from Europe to the US).

6.2 Social standards

A related concern about the coming EU enlargement involves social standards of work, including fringe benefits, work safety, pension schemes and welfare benefits. It is often argued that poorer countries practice "social dumping" by having lower social standards and thereby gain an unfair competitive advantage by avoiding the costs of higher standards. Harmonisation of these standards is proposed in order to eliminate the seemingly unfair cost advantages of low standards.

Such arguments are problematic as they originate from a static view of the world. They ignore the fact that different countries are in very different stages of economic development and that wages are also very different. It is well known that non-wage benefits and work standards are positively related to wages. Thus it seems likely that as poorer countries become more advanced and catch up with richer countries, internal competitive and social pressures in these countries will lead to both higher wages and higher non-wage labour costs.

It is natural to ask whether harmonisation of labour standards would facilitate the process of economic development and catching-up or whether it might even have harmful effects on the development process. An answer to this question requires an analysis of the dynamic forces of development that occur when a relatively poor country joins an area of well-developed countries.[23]

A typical model of the development process predicts that in the short run there will be migration of part of the work force of the poor country to the richer area. This will reduce labour supply, raise wages, destroy less productive jobs and induce the (supposedly benevolent) government of the poor country to raise work standards in line with wages. The poor country will also enjoy a gradual inflow of capital from the rich area. This will increase demand for labour leading to a further increase in wages and social standards. In due course, some of the guest workers from the poor country will gradually return to their home country. Eventually, the poor country will catch up with the rich area. When this happens there will be factor price equalisation with wages and social standards reaching the level of the rich area.

The preceding reasoning suggests that it would be a mistake to impose the social standards of the rich area on the poor accession country. The forces of development should be left to run their course. A policy of an early and quick equalisation of wages and social standards between rich and poor areas would have disastrous consequences. A large fraction of the jobs in the poor country would become unprofitable following the imposition of high wages and social standards, leading to mass unemployment and emigration out of the poor area. It is also likely that political pressures would emerge for massive transfers from the rich area to the poor country. Most likely, a policy of harmonisation would greatly slow down or even prevent the development process whereby the poor country gradually reaches higher standards of living. These events are well illustrated by the experiences of German unification, discussed in Box 3.2.

Differences in preferences of social standards and wages among different countries do not change the preceding conclusions. If one country prefers higher social standards, then wages should be correspondingly lower, other things being equal. With heterogeneity in preferences, the principle of subsidiarity should be applied, that is each country should be allowed to choose its preferred combination of wages and social standards (see Jackman, 2001).

These considerations suggest that harmonisation of social standards is an incorrect policy in EU enlargement. Instead, it is important to focus on ways to facilitate the process of development that enables the poor countries to catch up with the rich area. Free trade and the provision of new markets to the poor countries is the most important policy in support of this process. With new markets, the poor accession countries will have increased economic opportunities that will enable them to speed up economic growth and gradually raise the living standards of their citizens. The process of economic growth is necessarily slow by its very nature, but cen-

[23] See chapter 4 of Sinn (2003) for a detailed analysis of this process.

Box 3.2

German Unification and Social Dumping

From an economic perspective, German unification has failed. There was an initial catching-up until 1996, which was largely induced by massive tax incentives and investment subsidies that made the cost of capital negative for most investment projects and induced excessively capital intensive investment. However, the east German economy has stagnated and the gap between east and west Germany has widened. GDP per person of working age in the east has been falling relative to the corresponding value in the west for the last six years, and currently stands at 58 percent. However, due to massive public transfers, nominal incomes per capita are at a level of more than 80 percent of that of the west and pensions are at 110 percent of those in the west. In real terms, about 10 percentage points can be added to these numbers since the prices of non-traded goods, in particular the government-controlled rents, are substantially lower than in the west.

The east German economy absorbs much more resources than it produces, the current account deficit being about 45 percent of GDP. This is huge. Even the current account deficit of the Italian Mezzogiorno is only 13 percent of GDP. Two thirds of the east German current account deficit – which amounts to nearly 5 percent of west Germany's GDP – is financed by public transfers via the federal budget, via revenue-sharing agreements among the Laender (Finanzausgleich) and, primarily, via unemployment and pension benefits. One third is financed by private capital flows, of which, however, a substantial fraction feeds an increasing stock of east German public debt which has reached a higher per capita value than that in the west.

Unemployment in east Germany currently hovers around 17 percent, and there are regions where it is way above 20 percent, even though many unemployed have been hidden in early retirement schemes and training programs. Regular employment has been shrinking at an annual rate of nearly 2 percent since the middle of the 1990s, long after three quarters of east German industry had closed down. While the industrial sector is growing at a solid rate, albeit from a very low base, the overall prospects for the east German economy are far from satisfactory. The aggregate net public resource transfer from west to east has been about €800 billion, which is ten times more than the amount even the most pessimistic politicians had dared to forecast at the time of unification.

One reason for the economic disaster in east Germany is an excessive fear of social dumping which led to rapid wage convergence and an immediate jump in social standards. The cost of labour increased much faster than aggregate productivity, resulting in mass unemployment. High wages combined with tax incentives induce overly capital intensive investment, and they also made east Germany an unattractive location for international investment.

Before unification, eastern wage costs stood at about 7 percent of those in the west at the then prevailing exchange rate (4.3:1). With the 1:1 currency conversion in the summer of 1990, wage costs jumped to about 30 percent. Wage negotiations that followed in late 1990 and early 1991 specified a wage adjustment path reaching the west German standardwage level in only five years. Actual wages initially followed this path, but eventually increased more slowly, since the privatised and newly founded firms decided to leave the employers' associations or not to participate in these associations in the first place. Currently, about 85 percent of east German firms with a majority of all employees are not covered by union contracts.

The wage negotiations that followed unification had been proxy negotiations. They were carried out by the newly founded east German trade unions, which were completely under western control, and the employers' associations which had come from the west. Prior to privatisation there had been no private employers in the east who could have participated. Both bargaining parties agreed that rapid wage adjustment was needed to safeguard west German jobs and prevent foreign competitors from buying up east German firms and thus entering the German market. In doing so, they were supported by a firework of superficial arguments provided by politicians who forecast "flourishing landscapes" in "three to five years" and warned of massive migration flows which otherwise would have had to be expected.

The results of the proxy wage negotiations were flanked by the social union which implied high replacement incomes and forced market wages upward. The social union was introduced in the Summer of 1990 in addition to the monetary union. East Germans were included in the western pension system, received western type unemployment benefits and were entitled to nearly the western level of social aid. Social aid was initially higher than eastern wages and has remained high. A family of four is entitled to social aid and housing grants amounting to 75 percent of the average east German wage. Social aid and similar benefits implied excessively high wage costs and a replacement income with which the market economy was unable to compete.

tralised interventions in the form of prematurely harmonised social standards, say by the current EU, can only risk a slowing down of this process. There is no miracle cure for an instantaneous closing of differences in productivity, wages and living standards that have built up in the past over many years.

6.3 Redistribution between people and between states

The governance of interpersonal income redistribution in the enlarged EU is a delicate matter. The conventional public finance view is that redistribution should primarily be the concern of the highest level of government.[24] However, such a view implicitly assumes a certain degree of regional homogeneity, as otherwise the interpersonal redistribution becomes an interregional redistribution or one between countries. This is certainly a matter of concern for the EU, where the income disparities between rich and poor regions will differ by a factor of four or more after enlargement. Any universal redistribution scheme, say one that is based on a common progressive income tax schedule, would systematically distribute income from the richer to the poorer countries. For example, even an uneducated Swedish worker is rich relative to a Spanish government clerk. There would be redistribution of funds from Sweden to Spain. Such redistribution might also be legitimated from a deeper understanding of European solidarity, but it clearly goes beyond the insurance motive that can explain and justify interpersonal redistribution within a country.

Above, we warned against ignorance of the differences in the stages of economic development and against premature harmonisation of social standards that can bring serious harm to the process of development and catching-up of the poorer countries. These considerations also suggest that income redistribution through the tax and transfer systems should mostly be left to the national decision-making of EU member countries. Intergovernmental competition by well-meaning governments taking into consideration the productivity differences is probably the best way to achieve systems of redistribution that are in line with differences in labour productivity and also to achieve fast convergence in the growth processes of the different countries. This is particularly true if adverse migration effects are minimised by changing the welfare state as was suggested above. If there is any role for EU level public decision making, it is in providing opportunities and incentives for fast growth in the poorer countries.

Nevertheless, there is the difficult question of whether the EU should purposely redistribute resources from the richer to the poorer member countries. Much of the preceding analysis has viewed the EU primarily as an economic union with the single market as the main objective. However, it is sometimes suggested that the EU is more than a pure economic union even if it is not a federation, namely one that effectively shifts resources so as to even out any pre-existing income differences. Of course, opinions also differ on this question. In practice, the EU carries out large redistributive schemes, which suggests that the EU is something more than a common market. Thus it is possible to think of giving at least part of the redistributive task to the EU level.

Looking at current practice, much of the common agricultural policy appears to be motivated by distributional concerns, although such redistribution can hardly be defended since rich countries like France are among the biggest beneficiaries. The various structural and cohesion funds that are the second largest item in the EU budget can more easily be justified by redistributive goals. Their purpose is to make richer countries pay for the funds flowing to the poorer countries, and it seems that this purpose has been achieved. However, the funds should be more than just income transfers in that they help the less developed countries to improve their infrastructure and to support these countries' own forces of economic growth. The evidence on whether they achieved this goal is mixed. Some schemes appear to have reduced regional disparities (see, for example, De la Fuente and Vives, 1995 for a study of Spain). Yet, on balance, it seems that the current EU regional policies have not contributed positively to the catching-up processes of economic growth for the poorer regions of the EU, as discussed in Boldrin and Canova (2000). These results suggest that a reconsideration of the current EU redistributive role would be worth while.

[24] See, for example, Musgrave (1959, 1997) for the conventional view.

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