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Competition, Competitiveness, and Enterprise Policies

MICHAEL DUNFORD, HELEN LOURI, AND MANFRED ROSENSTOCK

4.1. Introduction

In this chapter our aim is to examine the effects on cohesion of European Union competition and competitiveness policies. More specifically, attention will be paid to three sets of measures: the rules of competition policy (Articles 85–94 of the EU Treaty); industrial competitiveness policies (Articles 3 and 130); and enterprise policies (Article 130). What these measures share is a concern to create a competitive environment and increase the competitiveness of European enterprises. To evaluate them, it is necessary to define competitiveness and explore its relation to cohesion.

4.2. Competitiveness and Cohesion

The use of concepts of competitiveness in relation to the performance of regional, national, and supranational economies has been a subject of significant controversy. This controversy has centred on the validity of analogies between microeconomic definitions of competitiveness of enterprises and definitions of the competitiveness of national economies, and it has led to a certain degree of convergence between measures of competitiveness and the measurement of cohesion.

At a microeconomic level, enterprises that are competitive are those that achieve a greater than average improvement in the quality of goods and services and/or a reduction in their relative costs that enable them to increase their profits (revenues–costs) and/or market share. The more a firm reduces its costs relative to its competitors—whether through increases in efficiency and in its organizational capacities or through reductions in wages, job security, social protection, or working conditions for the workforce—for a given level of product quality, or the more it increases its product quality (and the prices it can command) relative to its competitors for a given cost of production, the more competitive it is.

This microeconomic concept of competitiveness can be applied both to the short term and the long term, and it may well be the case that competitiveness in the long term requires rather different strategies from short-term competitiveness, as an ability to compete in the long term depends not just on a capacity at one moment in time to produce at costs and levels of quality which enable products to be sold profitably, but also

on an ability to keep abreast of, or shape, the evolution of markets. Normally, therefore, the word competitiveness is used to refer to the longer run.

Also, of course, competitiveness in the sense of profitability depends on the degree of concentration in a sector or the monopoly power of an enterprise, as nothing generates more value added per worker than monopoly. Accordingly, the concept of competitiveness is usually defined in relation to competitive markets.

At the level of a national economy it is not possible to sustain simple analogies with this definition of the competitiveness of companies and to argue, for example, that national competitiveness is reflected in the gap between exports and imports, in part because of the implication that trade is a zero-sum game in which the existence of winners implies the existence of losers. If a European company reduces its relative prices and increases its market share at the expense of a Japanese rival, it is not automatically the case that Japanese citizens lose, as the increase in some European incomes will increase the demand for Japanese goods, and the fall in prices will benefit Japanese consumers (see Krugman 1994).

While this trade theory argument is widely accepted, Krugman's wider claim that there is no theoretical rationale for the view that the growth of national and regional economies is determined by their performance in international product markets, and that international economic performance reflects differences in competitiveness, is more controversial. At the root of this claim and of most mainstream work centred on 'Solow-type' growth models is the view that growth is determined by largely domestic supply-side factors (such as the rate of growth of the population or the labour force, factor prices, the savings rate, and, in more recent 'new growth' models, the generation of technological knowledge). This account of growth has, however, been contested. In the Keynesian tradition; for example, it has been argued that exports (Kaldor 1966, 1970) and trade performance (Thirlwall 1979), in particular, and demand-side factors, in general, are the main determinants of growth, while 'evolutionary' growth models identify technical change as the main determinant of growth but reserve an important role for demand-side factors in the shape of exports and imports (see Dalum, Laursen, and Verspagen 1999).

Despite these disagreements about the impact of trade on growth, attempts to make sense of the notion of national competitiveness have led to a certain degree of agreement about the meaning of national or regional competitiveness. As the First Report on the Competitiveness of European Industry indicated (CEC 1996a), competitiveness is a means to an end and not an end in itself. The end is a country's capacity to deliver high levels and rates of growth of welfare and high and increasing living standards for its citizens. The means are measures which enable it to generate more wealth per head than its competitors in world markets. To preclude monopolistic behaviour, most definitions add the qualification that competition should take place in the context of free and fair market conditions (see D'Andrea Tyson *et al.* 1984).¹ This qualification itself

¹ Competitiveness has different meanings for the firm and for the national economy. A nation's competitiveness is the degree to which it can, under free and fair market conditions, produce goods and services that meet the test of international markets while simultaneously expanding the real incomes of its citizens. Competitiveness at the national level is based on superior productivity performance and the economy's ability to shift output to high productivity activities which in turn can generate high levels of real wages. Competitiveness is associated with rising living standards, expanding employment opportunities, and the ability of a nation to maintain its international obligations. It is not just a measure of the nation's ability to sell abroad, and to maintain a trade equilibrium: D'Andrea Tyson *et al.* 1984: 1.

requires qualification. In particular, it assumes that free markets lead to full employment and that the resources released as a result of structural change will be re-employed. Second, it does not acknowledge that 'how such competitiveness is achieved can also be a matter of concern. Devaluation of currencies to compensate for costs which have been allowed to get out of line, cutting real wages to compensate for insufficient efficiency or a relaxation of environmental standards may provide superficial relief for underlying problems' (D'Andrea Tyson *et al.* 1984: 1).

If these qualifications are set on one side, and if competitiveness is defined as the capacity of a country to ensure relatively high and sustained incomes for the owners of its economic assets and for its population, a good first indicator of competitiveness is GDP per head measured at PPS.

As indicated in the introduction, the cohesion objective is expressed in the treaties in terms of the equilibrated development of the Community as a whole and a reduction in disparities in the levels of development of its different regions, and is measured by indicators of the degree of inequality in Gross Domestic Product (GDP) per head between member states (national cohesion) and regions (regional cohesion).² To these indicators should be added an indicator of the distribution of wealth between individuals and households (social cohesion).

Cohesion is, therefore, measured using the same indicator as is used to measure competitiveness. In the case of competitiveness, what matters is whether measures increase the level and rate of growth of GDP per head and whether they result in a *potential Pareto improvement*. In the case of cohesion, what matters is whether measures lead to a more equal distribution of GDP per head and contribute to processes of catch-up in which less developed countries and regions and lower income groups enjoy faster rates of income growth than more developed or richer groups.

4.3. Competition Policy and Cohesion

The 'institution of a system ensuring that competition in the common market is not distorted' was one of the central founding objectives of the Community and was laid down in Article 3g of the Treaty of Rome. The rules of competition policy (Articles 85–94 of the EU Treaty) were, thus, introduced into the founding Treaty of the Community in 1958 and have subsequently remained virtually unchanged. These rules, in principle, disallow cartels, abuses of dominant positions, public monopolies, and state aids whenever they distort competition and affect intra-Community trade, and give the Commission direct competences to investigate these distortions and abolish them or grant derogations. With respect to the rules applying to enterprises, Commission control ensures that negative effects on competition that go beyond single member states, and might, thus, not be taken into account by national competition authorities, will be investigated. With respect to public monopolies and state aids, Commission control is necessary to prevent member states themselves from causing distortions of competition by favouring companies located in their own countries.

² These indicators require some modification to allow for differences in the cost of living within member states, the gap between GDP and GNP, and the availability of non-commodified resources.

Although the fundamental aims of Community competition policy are to prevent the abuse of monopoly power and improve the efficiency of the European economy, it does have an impact on cohesion, first, as a result of the impact of anti-trust measures and, second, as a result of Community control over state aids, on which this section will concentrate.

4.3.1. Antitrust measures and cohesion

Antitrust measures can have an effect on geographical cohesion, in particular through their effect on mergers, if the resultant restructuring efforts and possible job losses have an uneven regional distribution. With the establishment of the internal market, the number of mergers in the Community increased significantly. The share of transnational but intra-Community mergers in the total grew as well (Amin, Charles and Howells 1992). In order to be able to examine the competition effects of such mergers, a Community merger control regulation came into force in 1990.

Apart from the competition issues, it can be asked whether increased mergers and acquisitions have a systematic effect on cohesion. Under the assumption that companies in assisted areas are more frequently the subject of a takeover by external companies than they are the acquirer themselves, there are worries that restructuring efforts after the merger may have negative consequences for the companies in less developed areas. These possible consequences include: a run-down of the scale of production operations or a lower rate of growth; a reduction of the 'sophistication' of operations in less developed areas through the loss of key control and other functions, such as R&D or marketing; the consequent outmigration of qualified management and staff; and, finally, the removal or simplification of products and product lines. These effects would also have secondary consequences on the performance of the regional economy as a whole (Love 1989).

Empirical studies undertaken in the UK do not deliver clear conclusions, except for the loss of management functions and of regional service linkages (such as auditing, banking, and insurance) where functions are centralized after a takeover. The studies also suffer partly from methodological problems (see Love 1989). Other studies looking for possible systematic links between the characteristics of the acquirer and the performance of the acquired company (Ashcroft and Love 1992) have not specifically looked at the regional implications. It would thus be useful to carry out studies that show whether mergers and acquisitions have systematic cohesion-related effects by leading to a concentration of high qualification activities in central regions and/or to job losses that fall predominantly on the less qualified. Such studies would help establish whether Community actions in structural policy fields were warranted in such circumstances.

4.3.2. Control of state aids and cohesion

A more direct effect of competition policy on cohesion exists through the control of state aids exercised by the Commission (Art. 92/93 EC).

Article 92³ disallows in principle all forms of state aid which distort competition by favouring certain undertakings or products, and which affect trade between member states. However, this article also identifies a series of exceptions from this general prohibition. The first group of exceptions concern social aids to individual consumers without discrimination related to the origin of the products, aids in cases of natural disasters, and aids for certain areas of Germany to compensate for disadvantages caused by the division of Germany. These types of aid are automatically considered compatible with the Treaty. The second group of exceptions (Art. 92.3) can be considered compatible, but a considerable degree of discretion is left to the Commission as to whether to approve the proposed aids. Foremost among these exceptions is aid for regional development. A distinction is made between aid for the development of regions with a very low standard of living or serious underemployment (Art. 92(3)a) and aid for the development of other problem areas (Art. 92(3)c). The latter are usually areas with industrial or agricultural conversion problems, and the aid for them is less generous than for the very poor areas of the Community. Under Article 92(3) aid can also be allowed for important projects of common European interest, and for the remediation of serious disturbances in the economy of a (whole) member state. Further exceptions can be granted for aid for the development of certain economic activities, i.e. aid for specific sectors, as long as trading conditions are not adversely affected so as to be contrary to the common interest. This last condition also applies to aid for the promotion of culture. While decisions on these exceptions remain the exclusive domain of the Commission, the Council can, upon a Commission proposal, declare further types of aid compatible with the Treaty. This provision has been used to approve aid for shipbuilding.

In Article 93, the EC Treaty also lays down procedural rules which oblige the member states to notify the Commission of all proposals to grant state aid before they are put into force. It is only after approval by the Commission that aid schemes or projects can be executed. If the Commission has doubts about the compatibility of an aid project, it has to initiate a procedure, in the course of which third parties can also present their comments, to allow the Commission to get a fuller picture of the proposed aid and its effects before taking a final decision on the project (Schina 1987).

Two main phases can be identified in the development of the Commission's state aid policy (Warnecke 1978). During the first phase, from 1958 until the introduction of the first directive on shipbuilding aid in 1969, the Commission developed its interpretation of the scope of the Treaty rules and its approach to the treatment of cases. Decisions were taken on an *ad hoc* basis. During the second phase, which covers the period after 1969, the Commission developed systematic rules for the control of different types of aid as well as for the procedures to be followed. This second period can be subdivided into two sub-phases, the first of which ran from 1969 until the mid/late 1980s, and the second from the end of this sub-phase to the present. In the first sub-phase, which was characterized by cyclical and sectoral crises, the Commission faced increasingly interventionist attitudes by member states and a series of measures to delay structural change, in particular in the crisis sectors of shipbuilding, steel, and textiles. The frameworks

³ Article 92 is now Article 87.

for state aid control developed by the Commission for these sectors during this period reflect far-reaching concessions to national industrial policies. During the second sub-phase the Commission intensified its control. It was helped by the challenges of the single market project and by a reorientation of government policies towards more horizontal objectives. While the sectoral aid codes became stricter, the Commission also introduced or significantly extended guidelines and frameworks for the control of horizontal aid, such as aid for R&D, environmental protection, SMEs, etc. (Rosenstock 1995). While a set of rules for the control of regional aids was first introduced in 1971 and modified on several occasions up to 1979, a new Communication in 1988 codified a greatly refined approach, which, *inter alia*, provided clear criteria for eligibility under both Article 92(3)a and (3)c regions. In March 1998, the Commission published new guidelines which bring together all those provisions from the previous communications that are still in force and also introduce a reduction in aid intensities (cf. below). These guidelines will apply from 2000 onwards, i.e. from the date when the new Structural Fund regulations come into force.

These measures that, in principle, forbid state aid distorting competition and affecting trade also allow the Commission to grant derogations. They have a clear impact on cohesion, as different types of state aid may benefit companies in poorer regions disproportionately more or less than companies in other regions. In granting derogations from the general prohibition of state aid, the Commission takes these effects into account. During 1992–4, the latest period for which data are available for all member states, 53 per cent of all aid by member states was of a regional type, enabling long-term structural disadvantages as well as short- and medium-term problems of regions caused by crises in certain industries to be addressed by state aid (CEC 1997a). On the basis of the derogations foreseen in the EC Treaty, the Commission has, however, also approved aid for horizontal objectives, such as R&D, environmental protection, and support of small and medium-sized enterprises (SMEs) as well as sectoral aid for specific crisis sectors, such as steel and shipbuilding. In 1992–4, 29 per cent of all aid was of a horizontal type, and the remaining 17 per cent was sectoral aid. The Community, therefore, has also supported these horizontal objectives, though the Commission has to ensure that member states do not contravene regional policy objectives by using such aid schemes for 'hidden' investment aid outside of assisted areas. Even if horizontal aids are applied 'properly', the question of their regional distribution arises, as we shall indicate below (cf. below, sect. 4.3.2.3).

4.3.2.1. Member state regional policies

In defining their regional policy, member states can make use of three main variables: the choice of assisted areas; the aid intensities granted to investments in those areas; and the size of the budget allocated to regional policy in total.⁴ As member states' regional

⁴ The regional development policies of member states usually involve not just incentives to support investment in assisted areas but also include funds for infrastructure expenditure, improved public services, etc. Insofar as they are not company specific, these measures do not fall under the Commission's competences of state aid control and will be neglected in this chapter. They play, however, an important role in the locational choice of companies (see Netherlands Economic Institute 1993).

Table 4.1. Population covered by regional aid under Article 92 EC (as percentage of national population)

Member state	Article 92(3)a		Article 92(3)c		Article 92(3)a and 92(3)c	
	Current situation	Former situation ^a	Current situation	Former situation ^a	Current situation	Former situation ^a
Austria	3.5	—	31.7	—	35.2	—
Belgium	0.0	0.0	35.0	33.1	35.0	33.1
Germany	20.8	20.8	16.8	24.0	37.6	44.8
Denmark	0.0	0.0	19.9	20.7	19.9	20.7
Spain	59.6	46.5	16.3	18.5	75.9	65.0
France	2.5	2.5	39.9	41.8	42.4	44.3
Finland	0.0	—	41.6	—	41.6	—
Greece	100.0	100.0	0.0	0.0	100.0	100.0
Italy	34.2	36.6	14.7	5.6	48.9	42.2
Ireland	100.0	—	0.0	0.0	100.0	—
Luxembourg	0.0	0.0	42.7	79.7	42.7	79.7
Netherlands	0.0	0.0	17.3	19.3	17.3	19.3
Portugal	100.0	100.0	0.0	0.0	100.0	100.0
Spain	0.0	—	18.5	—	18.5	—
United Kingdom	2.9	2.9	35.2	35.3	38.1	38.2
EU-12	24.9	23.9	22.8	23.6	47.7	47.5
EU-15	23.6	—	23.1	—	46.7	—

^a Situation in 1993, except DK (situation in 1991), I (situation in 1992), IRL (previous situation too old and irrelevant for comparison).

Note: The calculations are based on population data for 1992. The decisions on the eligible regions were taken between 1993 and 1996.

Source: Directorate General of Competition Policy.

aid schemes have to be notified to the Commission for approval, it can influence these variables with a view to supporting cohesion objectives.

A. The definition of eligible areas. As mentioned above, Article 92(3) EC distinguishes between two types of regions that are eligible for regional aid: the least developed areas (92(3)a regions) and areas facing other problems (92(3)c regions). Table 4.1 shows the share of population covered by these two types of assisted areas broken down by member state.

The Commission's objective has been to ensure that regional aid is concentrated on those areas most in need while at the same time preventing distortions of competition through investment aid in regions which do not face structural handicaps (see CEC 1997b). In spite of pressures from member states to widen the coverage of eligible areas, in particular in the more central areas of the Community (usually covered by the derogation of Article 92(3)c), recent revisions of the maps of assisted areas have shown a

slight reduction in the share of population covered by this provision, from 23.6 per cent to 22.8 per cent of EU-12.⁵ At the same time other peripheral areas, particularly in Spain, were added to the list of eligible regions under Article 92(3)a, taking the whole coverage from 23.9 per cent to 24.9 per cent of the Community population (EU-12). Since only Austria of the new member states has a small area designated as a lagging area (Burgenland), coverage under Article 92(3)a for the Community of 15 is slightly lower at 23.6 per cent, while the share of population covered by Article 92(3)c areas has risen marginally, to 23.1 per cent.

As a result of the Commission's policy, a framework has been set so that regional aid can now be relatively more concentrated in the most disadvantaged regions of the Community. This greater concentration is also apparent from the shares of population covered by regional aids broken down by member state. While the four cohesion countries have the status of assisted areas either in their entirety (Portugal, Greece, and Ireland) or to a very large degree (Spain with 75.9 per cent), coverage in most other member states is between 35 per cent and 49 per cent, while in those countries with high levels of income per head and low internal divergences (Denmark and the Netherlands), coverage is even lower (below 20 per cent).

B. Aid ceilings. Control of the areal coverage of incentive schemes is reinforced by the aid intensity ceilings approved by the Commission, which in general are significantly higher in the Article 92.3.a areas. This differential is to give those regions with the biggest structural handicaps and enterprises usually lacking competitiveness sufficient scope to increase their attractiveness to potential investors.

The weighted average approved intensity of aid in all assisted areas of the Community is 32.3 per cent, with 18.1 per cent for Article 92(3)c areas and 46.2 per cent for Article 92(3)a areas (see Table 4.2, where all figures are for EU-15 and in Net Grant Equivalent (NGE)).⁶ Therefore, intensities in the latter areas are, on average, 2.6 times greater than in the former, reflecting the greater development needs of the Article 92(3)a areas. This positive result in terms of cohesion has, however, to be qualified. As these intensities are approved intensities, they only create the framework conditions for a policy conducive to cohesion. The effective intensities granted by member states are often significantly below these levels. Effective intensities fall short of the ceiling, particularly in Spain and Ireland, which contain some of the poorest regions benefiting from the highest approved intensities but where aid on average only reaches 40 per cent of those intensities. By contrast, in countries such as Belgium and Germany, aid reaches around 60–70 per cent of their ceilings (Marques 1994). Thus, the advantage granted to the poorest countries through their high ceiling is eroded, as these ceilings are not effectively used. For the other regions, 92(3)a as well as 92(3)c, utilization rates of the

⁵ The main changes in this area were a significant reduction of assisted areas in the western part of Germany (where coverage was reduced from 24 per cent to 16.8 per cent) and a significant increase in assisted areas in Italy (from 5.6 per cent to 14.7 per cent), while at the same time areas falling under Article 92(3)a in Italy were reduced slightly (see CEC 1996f: 68).

⁶ The maximum approved intensities are for large enterprises and include aid from all sources (including Community Structural Funds). The differentiation of ceilings reflects the different intensities of regional problems inside and between member states. In general, SMEs can benefit from higher aid intensities up to the limits of 75 per cent and 30 per cent NGE respectively (see below).

Table 4.2. Weighted average approved aid intensities^a

	Type of region	Current situation		Previous situation	
		Population covered	Weighted average of approved aid intensity (NGE)	Population covered	Weighted average of approved aid intensity (NGE)
EU-12	92(3)a	24.9	46.3	24.7	54.2
	92(3)c	22.8	17.9	22.7	19.5
	Average	47.7	32.7	47.4	37.6
EU-15	92(3)a	23.6	46.2	—	—
	92(3)c	23.1	18.1		
	Average	46.7	32.3		

^a The current situation refer to the situation in 1996. The previous situation refers to 1993, except for Denmark, Ireland, and Italy. Aid intensities are those which are applicable to all companies, independent of their size, and include all possible cumulations of aid calculated on the same basis as regional aid. In some regions, SMEs can benefit from higher aid intensities than those shown in the table.

Source: Directorate General of Competition Policy.

ceilings are around 50 per cent. As a result the absolute supplementary incentive that investors can receive in Article 92(3)a regions as compared to Article 92(3)c regions is, in fact, halved. The remaining difference in aid may be insufficient to cover the extra handicaps of locating in the poorest regions and may consequently be insufficient to attract the large amounts of inward investment necessary to improve their economic structures.

In order to tackle this problem, the Commission's general policy recently has been to insist on a reduction of regional ceilings in all assisted areas. In the past, it had approved intensities of up to 75 per cent NGE in Article 92(3)a areas and up to 30 per cent NGE in Article 92(3)c areas. With the new guidelines on regional aid, these ceilings will be reduced significantly.⁷ As the maximum intensities in Article 92(3)a areas were almost never reached, while in Article 92(3)c areas the maxima constituted effective intensities for some projects, this parallel reduction can, in fact, increase the effective advantage of Article 92(3)a areas and thus contribute to cohesion.

The effects of this new approach can already be seen in the recent evolution of approved aid ceilings, which have fallen in both Article 92(3)a and 92(3)c areas, although slightly faster in 92(3)a areas. As ceilings were seldom reached in weaker areas, this change is unlikely to have a significant negative effect on the effective support levels in the least developed regions of the Community. Furthermore, the slower reduction of intensities in Article 92(3)c regions is because ceilings in some of these regions, which are at the same time eligible for Structural Funds support under Objective 1, have been increased. From a Structural Funds point of view, this alignment also has contributed to cohesion.

⁷ As from the year 2000 onwards, the maximum aid intensity will fall to 50 per cent NGE for Article 92(3)a regions and 20 per cent for 92(3)c regions. Steps in the direction of this new approach have already been taken in Portugal, Spain and Italy, where the new ceilings for Article 92(3)a regions do not exceed 60 per cent NGE.

Table 4.3. Indicators of regional state aid

	1981-6	1986-8	1988-90	1990-2	1992-4
Aid to manufacturing industry as percentage of value added in manufacturing	4.8	4.0	3.8	3.8	4.0
Regional aid as percentage of total aid to manufacturing industry	37	39	38	50	53
Regional aid as percentage of value-added of manufacturing industry	1.78	1.56	1.44	1.85	2.12
Regional aid as percentage of total public expenditure	n.a.	0.75	0.65	0.78	n.a.

C. Budgets: the quantitative weight of regional aid. By influencing the choice of assisted areas and by limiting the aid intensity that can be granted in any area to the amounts needed to compensate investors for the regional handicaps, supplemented by additional incentives to choose these regions, the Commission can prevent investment aid being given to projects outside areas in difficulty. This creates a framework supporting cohesion and, at the same time, limits distortions of competition through the granting of excessive aid to specific projects.

The furthering of cohesion will, however, be limited if member states support their 92(3)c regions with huge budgets, enabling them to attract many mobile projects, while other member states lack the financial resources to support a significant number of projects in their 92(3)a regions.⁸ So far, the Commission has not been in a position to influence national aid budgets. The problem can be solved by support from the Structural Funds for the Community's poorest regions.

As Table 4.3 shows, while state aid to the manufacturing industry as a percentage of its value added has not shown a sustained tendency to fall since 1986-8, the share of regional aid in this total has significantly increased since 1990, as has the ratio of regional aid to value added in the manufacturing industry. The average annual amount of state aid for regional purposes during this period was 23.1 billion ecus (see Table 4.4).⁹ Compared to this figure, the contribution from Structural Funds that could be characterized as equivalent to state aid¹⁰ has been relatively small (an annual average of 1.6 billion ecus).

⁸ In a member state in which all regions have a per capita GDP below the EU average, national regional aid cannot contribute to intra-Community cohesion, as funds are transferred 'from the poor to the poor'. In such countries, cohesion can only be furthered by Community support.

⁹ This figure includes around 370 million ecus of general investment aid, which in the cohesion countries in particular is partly co-financed by the Community and in effect is close to regional aid. In those member states where only a part of the population lives in assisted areas, the total expenditure for general investment aid has been multiplied by the share of the population living in assisted areas, on the assumption that this kind of aid is distributed evenly.

¹⁰ These figures are based on estimates limited to the following fields of intervention: industry, services and crafts; increasing business competitiveness; and rural development SME (see CEC 1995d).

Table 4.4. Regional aid measures by member states and the Structural Funds in 1992-4
(annual averages in million ecus)

	Regional aid	Of which in Art. 92(3)a and 92(2)c areas	General investment in assisted areas ^a	Total national aid	Aid per capita in assisted areas (ecu)	National aid per capita (Germany = 100)	ERDF	Total	Total per capita in assisted areas (ecu) ^b	Total aid per capita (Germany = 100)
Germany	13,643.52	13,191.4	0.0	13,643.5	379.4	100.0	304.4	13,947.9	387.9	100.0
Italy	5,988.49	5,742.2	115.8	6,104.3	250.9	66.1	181.1	6,285.4	258.3	66.6
Ireland	342.91	342.91	0.0	342.9	97.9	25.8	120.6	463.5	132.3	34.1
Luxembourg	33.06	0.0	0.0	33.1	108.9	28.7	3.9	37.0	121.7	31.4
Belgium	196.57	0.0	11.1	207.6	62.9	16.6	30.0	237.6	72.0	18.6
Portugal	151.56	151.56	66.9	218.5	22.1	5.8	279.3	497.8	50.4	13.0
France	1,061.22	546.7	49.0	1,110.2	44.2	11.6	145.6	1,255.8	50.0	12.9
Netherlands	119.9	0.0	6.9	126.8	44.0	11.6	12.9	139.7	48.4	12.5
Greece	216.58	216.58	42.4	258.9	25.4	6.7	131.9	390.8	38.3	9.9
United Kingdom	704.37	460.8	18.9	723.3	33.0	8.7	113.9	837.2	38.2	9.8
Spain	251.12	55.7	56.3	307.4	12.1	3.2	273.7	581.1	22.9	5.9
Denmark	13.7	0.0	0.0	13.7	13.4	3.5	6.5	20.2	19.7	5.1
Total	22,723	20,707.8	367.2	23,090.2	180.7		1,603.8	24,694.0	193.2	

^a In those member states which are assisted areas in their entirety under state aid rules, total general investment aid has been apportioned on a pro-rata basis according to population.

^b The nominal amounts are divided by the population of the assisted areas according to regional state aid schemes. As some Community aid goes to regions which are not eligible under state aid rules, the figures given here slightly overestimate real aid intensity per capita. Given that national aid far exceeds Community aid, this overestimation is of minor significance.

Source: European Commission 1997.

Almost 85 per cent of regional aids from national sources go to areas eligible under Article 92(3)a, i.e. to the poorest areas of the Community. A further 7 per cent of total regional aid went to (West) Berlin and the former Zonal Border Area, which during the period 1992–4 were still eligible under Article 92(2)c. The size of this aid has, however, fallen significantly.

Table 4.4 shows that more than 85 per cent of regional aid is granted in just two member states, Germany and Italy, which are characterized by the dual nature of their economies and which have by far the widest internal regional disparities. For these two countries, the big transfers from their richer to their poorer regions will help internal convergence by attracting investment. The underdeveloped regions in Germany and Italy compete, however, with similar regions in the Cohesion Countries, where the regional aid budgets are much lower, so that these countries can only support a few investments or can only aid projects at lower intensities, which may not be sufficient to attract investors. The Structural Funds compensate in part for this disadvantage, but as Table 4.4 shows, even after including ERDF spending,¹¹ total aid per capita in assisted areas in the Cohesion Countries is only between 5 and 34 per cent of German levels. Compared with the ranking on the basis of national aid alone, Spain and Ireland advance by one position, while Portugal climbs four positions. With the increases in the Structural Funds budgets foreseen for the period up to 1999, this large difference in per capita aid is likely to decline.

4.3.2.2. *State aid control and the activities of the Structural Funds*

Since Structural Fund interventions and control of regional state aid both help develop the disadvantaged regions of the Community, the efficiency of these policies depends to a great extent on their coherence. This coherence, in turn, depends upon the extent to which the eligible areas, the programming periods, and the decision-making processes correspond.

A. Eligible Areas. Insofar as the choice of eligible areas is concerned, there is a high degree of consistency between the two instruments. As Table 4.5 shows, however, there are some differences which will continue to exist until 1999, the end of the current programming period. While virtually all Objective 1 areas have also been accepted as assisted areas under Article 92(3)a or c,¹² some areas covered by Objectives 2 or 5b of the Structural Funds are not eligible for state aid (representing 6.6 per cent of Community population). In these areas, Community assistance is confined to other forms of investment aid, e.g. aid for SMEs at lower rates, the environment, R&D, infrastructure, and training support. Conversely, areas containing 2.7 per cent of the Community

¹¹ Some of the expenditures of the EAGGF Guidance section in Objective 5b regions also will have the character of regional aid. There is, however, no breakdown of this category of expenditure, which would allow elements of state aid to be isolated. The figures in the table are, therefore, limited to aid to the manufacturing sector.

¹² The one small exception is in Scotland, where the Objective 1 area is the Highlands and Islands Development Board area. Since the decision on assisted areas under state aids rules was based on NUTS classifications, the UK authorities did not propose certain areas (parts of the NUTS III regions of Strathclyde, Highlands, Islands, and Grampian) as eligible for state aid.

Table 4.5. Correspondence between areas eligible for member states' regional aid and Structural Funds (as percentages of Community population)

	Eligible regions under Structural Funds	Regions not eligible under Structural Funds	Total
Regions eligible for regional aid under Article 92(3)	44	2.7	46.7
Regions not eligible for regional aid	6.6	46.7	53.3
Total	50.6	49.4	100

population that are eligible for state aid under Article 92(3)c are not eligible for assistance under any of the Structural Funds objectives. Not only are there areas in which the two sets of definitions do not overlap; the size of the coverage also differs, with 50.6 per cent of the Community population living in areas eligible for Structural Funds support, compared with 46.7 per cent of the population living in areas eligible for national assistance.

There are two reasons for these discrepancies. First, there are differences in the criteria for eligibility and their interpretation. More specifically, the eligibility criteria under both Objective 1 and Article 92(3)a EC are the same, namely, that regional GDP per capita falls below 75 per cent of Community average. Under the Structural Funds regulations, this criterion has, however, been interpreted less strictly to allow the inclusion of regions in which the income level is close to this threshold or where special reasons apply. As a result, some Objective 1 regions (containing 1.5 per cent of the Community population) are not included under Article 92(3)a, but only under Article 92(3)c. (Examples are Highlands and Islands, Corsica, Abruzzo, and Hainaut.) In the case of the areas covered by Objectives 2, 5b, and 6 and Article 92(3)c, conversely, the criteria of eligibility differ. Under current competition rules, the regions in question must cross thresholds related to the national averages for unemployment and GDP per capita and defined separately for each member state, taking into account its situation relative to the Community averages. The criteria for Objectives 2 and 5b give more emphasis to unemployment and the evolution and level of industrial employment (Objective 2) or to the importance of agricultural employment, low agricultural income, and outmigration (Objective 5b). Both sets of rules employ secondary criteria that allow the specific problems of regions to be taken into account. For the northern regions of Sweden and Finland suffering from remoteness and very low population densities, the basic criterion is identical under both sets of rules (low population density), but the thresholds differ (8 inhabitants per km² under Structural Funds rules and 12.5 inhabitants per km² under Article 92(3)c).¹³

¹³ The higher threshold under state aid rules identifies regions eligible for national government transport aid.

The second reason for these differences lies in the decisions member states make when they submit proposals for assisted areas to the Commission. Two situations arise. First, member states may decide not to grant nationally funded regional aid to areas receiving assistance from Structural Funds. Although it is conceivable that, in a reference scenario in which the Structural Funds did not exist, the member state in question might still have confined its support for these areas to measures funding infrastructures or aiding SMEs, it is also reasonable to ask whether, in these circumstances, a member state is partially substituting Structural Fund support for its own effort. The opposite situation, which arises in areas receiving national but not Structural Fund assistance, is less difficult, as the Structural Funds address problems on a Community level, whereas national aid can also tackle issues which are of national significance but are less acute from a Community point of view. Ideally, therefore, the population coverage of the Structural Funds should be below the coverage of member state aid for regional purposes, while all areas eligible for Structural Fund support should also be covered by state aid. In this way, consistency could be ensured, while at the same time member states would have some leeway to set national priorities for regional development.

B. Programming periods and the decision-making process. At present the programming periods largely correspond, as decisions on member states' regional aid normally relate to the same period as the Delors II package. In some member states, however, national programming periods have not been brought into line with those of the ERDF, particularly in those cases for which national aid for the areas concerned is much greater than Community funding. Further progress on this issue is expected for the new programming period starting in 2000.

Insofar as making decisions about demands for co-financing is concerned, there are sometimes delays when national aid schemes have not been approved because member states have provided the Commission with incomplete information and also because of the abovementioned inconsistencies in regional coverage.

4.3.2.3. Impact of other state aid

The state aid control instruments of competition policy apply not just to the regional aid packages of member states but also to horizontal and sectoral aid. Although sectoral aid now accounts for just 17 per cent of all aid to manufacturing industry, due in particular to the decline in the magnitude of aid for the steel industry, horizontal forms of aid, which include aid for R&D, SMEs, environmental protection, and energy conservation, represent 29 per cent of the total. It is often argued that these types of aid, and in particular R&D aid, tend to benefit the richer regions of the Community, where the major company research centres are concentrated. Studies of the regional distribution of *Community* R&D aid during the period 1983–90 (Seidel 1994) indicate that this aid was, indeed, concentrated in the economically strongest regions of the EU-12, so that Community support for R&D does tend to counteract the pro-regional cohesion effects of regional aid. Similar studies of the regional distribution of state aid for R&D have been undertaken for several large member states. These studies indicate that national aid for R&D has tended to reinforce the concentration of privately funded

R&D in the most prosperous regions. At the same time, government funded R&D has also been significantly higher in relation to GDP in the richer member states (see CEC 1996f). In the specific frameworks and guidelines it establishes for these types of aid, the Commission does give incentives for the location of R&D in assisted areas by allowing higher aid intensities for projects in such regions. Clearly, however, these measures are not sufficiently strong to counter the forces leading to a concentration of R&D aids in stronger regions and member states, though it must be remembered that such aid is granted mainly to increase the overall competitiveness of Community industry and overall levels of per-capita income.

4.3.3. Conclusion

Through its influence over the choice of assisted areas and ceilings for aid intensities, Community state aid control has created conditions that allow a concentration of member state regional assistance in those areas most in need. However, the poorer member states lack the financial resources to take full advantage of these opportunities and are, therefore, unable to match the support Italy and Germany, the 'dual economies' with huge national budgets, provide for their underdeveloped regions. No precise statements can be made on the regional distribution of non-regional state aid and, thus, the question as to whether this aid supports or counteracts cohesion remains open.

4.4. Industrial Competitiveness

Industrial competitiveness measures fall under Articles 3 and 130 of the Treaty of European Union, which require the Community and the member states to adopt policies and actions capable of 'strengthening the competitiveness of Community industry' and ensuring 'that the conditions necessary for the competitiveness of the Community's industry exist'.

More specifically, the aim of EU industrial policy is create an environment that stimulates the constant 'structural adjustment' of European industry (redeployment of resources into sectors where demand and profits are greatest) to enable it to compete successfully in European and global markets (CEC 1990; see Table 4.6).¹⁴ At the centre of this approach lay the free trade view that open and competitive markets lead to an optimal allocation of resources, that the way industry reacts to the market is through constant 'structural adjustment', and that competitive adjustment depends first and foremost on the initiatives of the industrial sector (and not on the actions of public authorities whose role is not to take action in favour of a particular enterprise or industry). To enable these industrial initiatives to occur, certain conditions were viewed as essential: that EU industry remain at the forefront of industrial and technological

¹⁴ The 1990 Communication (see Table 4.6) outlined a new approach to industrial policy that (1) rejected sectoral strategies and protectionism as instruments of industrial policy, (2) emphasized the leading role of industrialists, and (3) identified the role of public authorities with the creation of a dynamic environment favourable to industrial development.

Table 4.6. A framework for industrial policy in an open and competitive environment

Structural adjustment	Catalysers	Accelerators
Meeting the preconditions: <ul style="list-style-type: none"> • Guarantee a competitive environment • Maintain a stable economic context • Ensure high educational attainment • Promote economic and social cohesion^a • Protect the environment 	<ul style="list-style-type: none"> • Internal market (standards, public markets, abolition of national quotas, coherent legal framework, trans-European networks) • Trade policy 	<ul style="list-style-type: none"> • Research, development, technology, and innovation • Improve training and use of human resources • Policies for small and medium-sized firms • Producer services

^a In the cohesion section of *Industrial policy in an open and competitive environment*, it is suggested that flexible, innovative and knowledge-intensive industry presupposes the existence of cohesive societies. The sharing of information, consultation and participation create trust and encourage structural adjustment. Social protection provides security and facilitates adaptation and co-operative industrial relations. An improved allocation of time between work and non-work permit agreement over flexible hours which enable a more efficient use of equipment. There are therefore ways in which measures that add to social costs offer certain advantages to industry though, the communication adds, such measures require greater productivity.

Source: CEC (1990).

innovation; that innovations diffuse; that rates of profit remain sufficiently high and wages and taxes sufficiently low to provide the resources for financing investment; and that skills be constantly upgraded. In this context the aim of public policy is to create a common environment (a level playing field) conducive to an acceleration of industry led structural adjustment through a coherent use of all EU policies (competition, trade, internal market, R&D, education and training, environmental protection, transport and communications, small and medium-sized enterprise, and structural policy) that influence the industrial sector (CEC 1990). As these policies are the responsibility of a number of directorates general, agencies, and national organizations, each with their own objectives and spheres of action, this approach entails action designed to shape a wide range of different policies which are the responsibilities of, and are implemented by, other actors.

How these principles were to be put into action was mapped out in the chapter entitled 'Towards global competitiveness' of the white paper on *Growth, Competitiveness and Employment* (COM (93) 700 final; Table 4.7) in which the Commission identified a number of instruments and four objectives: to help European firms adapt to the global competitive situation; to exploit the shift to a knowledge-based (information) economy; to support sustainable development of industry; and to aid the reabsorption of the human resources released as a result of productivity growth.

Table 4.7. Towards global competitiveness

<p>1. Help European firms adapt to the new globalized and interdependent competitive situation</p>	<ul style="list-style-type: none"> • capitalize on the Community's industrial strengths • develop active policy of industrial cooperation with transition economies and Pacific rim • establish concerted approach to strategic alliances • ensure competitive functioning of markets opening up markets that are closed
<p>2. Exploit the competitive advantages associated with gradual shift to a knowledge-based (information) economy and the increasing relative importance for competitiveness of (1) non-physical, knowledge-based investment and activities such as research and training, and accounting, marketing, and other services and of (2) organizational capacities</p>	<ul style="list-style-type: none"> • shift taxes from employment disincentives to incentives for efficient and less polluting use of resources • restructure financial instruments and use of public funds to reduce incentive to increase capital intensity and increase incentive to raise immaterial investment in research and training in order to increase incorporation of innovation in new products and processes • streamline and rationalize regulatory framework and launch a policy aimed at quality avoiding fragmentation of the internal market and stimulating the move away from 'Taylorism'
<p>3. Promote a sustainable development of industry</p>	<ul style="list-style-type: none"> • increase and coordinate R&D into clean technologies • develop economic incentives prevent pollution and to support diffusion of R&D into products and processes
<p>4. To counteract the failure to reabsorb the human resources released as a result of productivity growth, and reduce the time lags between the pace of change of supply and the corresponding adjustments in demand. Time lags are due to cumbersome rigidities in income distribution, in modes of consumption, in the relatively low level of receptiveness to innovation within the Community, in the geographical structure of growth, and in the unsatisfactory functioning of markets.</p>	<ul style="list-style-type: none"> • on the demand side adopt initiatives aimed at speeding up a concerted recovery of demand and examine measures likely to promote emergence of new markets for goods and services and, in particular, for environmental protection, biotechnologies, and information services including multimedia • on the supply side encourage structural adjustment and support development of small and medium-sized enterprises • in relation to the coordination of demand and supply, facilitate partnership between large firms and subcontractors, establish interfaces between producers and users, and stimulate collaborative local networks and clusters that exploit the potential of the geographical diversity of the EU

The 1994 Communication on an Industrial Competitiveness Policy for the EU (COM (94) 319 final) sought to identify and propose a programme of action. This Communication was centred on earlier principles, though more emphasis was placed on job generation, which was itself seen to depend on the efficiency and innovativeness of European industry and the attractiveness of the EU as a site for industrial investment (in the context of a more labour-intensive model of development). The communication started with an evaluation of a number of factors on which competitiveness depends (knowledge and human resource development, development of interoperable trans-European networks, improved productive organization, increased economic and social cohesion, and a closer articulation of strengthened scientific and technological development with the market sector) and of the potential of EU industries to enter growth markets (knowledge and culture, health care and biotechnologies, and environmental protection). In the light of this analysis, and of the importance attached to new growth sectors and the generation of employment, the communication identified four industrial policy priorities:

- to promote intangible investment in areas such as training, R&D, and methods of work organization (in line with the move to an information society);
- to develop industrial cooperation and networking inside and outside the European Union and to increase the presence of European companies in high growth markets, stimulate collaboration;
- to strengthen competition by completing the internal market, establishing open standards (technical regulations, standards and certification), eliminating factors which distort competition, and securing access to non-EU markets;
- to modernize the organizational structures and support procedures of public authorities,¹⁵ to limit taxes and social security contributions and make them more responsive, to improve the industrial environment, and to use public purchasing and investment activities to stimulate development.

Each of these priorities was translated into a wide range of related objectives and horizontal policy actions, designed to coordinate and shape actions under a number of common policies, particularly with respect to research, cohesion, vocational training, networks, and trade, and to improve coordination and consultation between member states.

In March 1995 a draft proposal for an Action Programme (CEC 1995a) was published. Four industrial competitiveness policy objectives were highlighted: the development of the internal market which includes making it operational through the 'new approach' and harmonization of national legislative frameworks; greater consideration

¹⁵ Of the measures adopted to modernise public authorities, the most important is the Integration of Administrative Data (IDA) programme adopted by Council decision 95/468/CE of 6 November 1995. The major aim of the IDA programme is 'to improve the interchange of data between administrations and to provide companies and the public with easier access to information' which is essential 'to ensure the smooth operation of the internal market'. The idea is to develop the exchange of electronic data between public authorities and administrations at local, regional and national level, Community institutions, the European Parliament, the Council, and the European agencies; and to improve Community decision-making processes and the implementation of common policies, offering possibilities of greater cohesion through a greater and more equal uptake of the opportunities of integration.

of industry's needs in research policy; the establishment of the information society; and the promotion of industrial cooperation. To meet these objectives actions on immaterial investment, industrial cooperation, competition, and modernization of the public authorities were identified. Their financial impact was principally on the budgets for the Community Support Frameworks, Cohesion Fund, and research and development Framework Programme.

A very large number of Community policies, therefore, contribute to industrial competitiveness. In section 4.3 attention was focused on the impact of actions to ensure fair competition through the regulation of state aids. In this section attention will be focused on the impact of the 'new approach' to standards and the harmonization of national legislative frameworks and the promotion of industrial cooperation. Attempts to give greater consideration to industry's needs in research policy will be considered in the chapter on research and development policies (Chapter 5).

4.4.1. *Harmonizing technical rules and standards*

Setting standards and introducing technical regulations are key elements of the single market programme and are important components of competition, market integration, and industrial policy. The case for competitive markets rests substantially on a comparison of situations of perfect competition, optimal for consumers and monopoly situations, in which there is a transfer of consumer surplus to producers and a reduction of that surplus. To act to limit monopoly situations and preserve competition (while creating scope for the realization of scale economies), Community industrial policy seeks to limit the segmentation of markets through the harmonization of standards and assurance of the compatibility of products. Harmonization can provide consumers with a number of advantages: compatibility is needed to enable consumers to purchase complementary goods; compatibility enables demand to be satisfied in a number of ways with possibilities of switching from one make to another without substantial switching of costs; compatibility increases network externalities defined as situations in which the utility of a good for a user depends on the number of users; and compatibility increases the substitutability of goods and, accordingly, the cross-elasticities of demand, making consumers less captive to particular firms. At the same time, standards raise the quality and safety of products and facilitate comparisons between different products, while scale advantages reduce costs. Of course, some of these gains presuppose that the resources released as a result of a loss of protection are re-employed.

The question of the impact on cohesion involves two main sets of issues. First, the establishment of restrictive technical regulations may fragment the internal market and may protect industries in more advanced areas from industries in less developed parts of the EU. Second, the establishment of standards may damage cohesion insofar as large groups in core areas represented in the standard setting agencies secure decisions that give them a market advantage. In some cases there is evidence that changes in the economic environment can have effects on cohesion that are so adverse or sensitive that derogations are required to give weaker areas and member states more time in which to adapt.

4.4.1.1. Cohesion and the setting of European standards

Setting standards is a critical instrument of EU market integration. At present, setting standards conforms to the new approach introduced in May 1983. Under the old approach, the Commission developed detailed directives for individual products which national governments were required to adopt. The new approach directives (which have the status of law) were limited to essential requirements of safety and environmental protection, and the setting of European standards was mandated to three agencies: Centre Européen de Normalisation (CEN); Centre Européen de Normalisation Electrotechnique (CENELEC); and European Telecommunication Standards Institute (ETSI). In 1992 a White Paper on Standard Setting envisaged that standards would be used in all European policies.

CEN has eighteen members: the fifteen EU states and Iceland, Norway, and Switzerland. There are three methods used by CEN to set a European standard. First, a standard is elaborated by a technical committee in which participation is confined to European actors (national delegations, Commission representatives, associated bodies, and observers representing European federations). Second, an existing international standard is adopted. Third, the setting of standards is subcontracted to the ISO. In this case, European members of the ISO will vote twice; first, in the ISO where each country has one vote and, second, in the CEN where the Council's system of weighted votes is practised. This third procedure was created in accordance with the 1991 Vienna Agreement.

In May 1995 CEN produced its 2,000th standard, of which 700 were Community mandates (see Table 4.8). The new approach directives comprise the main area where European standardization is needed to support Community policies. Another area where standards are necessary is public procurement, as reference to standards is obligatory in all public tenders. With two exceptions, at the point when directives come into effect there is a sufficient number of supporting standards available to industry. The exceptions are machinery, where industry was slow to react, and construction, where there is no consensus on European standards.

In June 1992 a new category of associate members joined the CEN to represent industrial bodies (European Chemical Industry Council (CEFIC), European Construction Industry Federation (FIEC), European Confederation of Medical Devices Association (EUcomed)), trade unions (European Trade Union Technical Bureau for Health and Safety (TUTB), itself part of the European Trade Union Confederation (CES)), and consumer groups (European Association for the Co-operation of Consumer Representation in standardization (ANEC)). A more recent development is establishment on the initiative of DG XXIII of a new organization, the European Office of Crafts, Trades, and Small and Medium-Sized Enterprises for Standardization (NORMAPME) to represent the interests of SMEs in the light of a Euromanagement study which identified a number of shortcomings in the areas of standards compliance, certification, and quality assurance. SMEs can, however, be divided into two groups differently affected by the standardization process: a number of active SMEs (often in high technology sectors) follow and sometimes shape (European) standards and find standardization helpful; and the vast majority who are either indifferent or hostile

towards standardization, perceiving standards as obstacles driving up their costs. Associates participate in discussions but do not have voting rights. Apart from their direct involvement at EU level, interest groups are also represented within national standardization bodies, giving them some indirect influence in approving European standards. In addition, programming committees and technical sector boards have been created better to coordinate CEN activities with interested parties.

The concession of associate membership status to new interest groups indicates recognition of a problem which has a cohesion dimension. As far as SMEs are concerned, the organizations setting standards argued that the relatively high cost of compliance is a consequence of the lack of visibility of the standard-setting procedure, the lack of participation, and a lack of information. As SME participation is new, it is too early to assess their success in influencing the procedures for setting standards. The SME-large firm divide also has a territorial dimension: if the interests of SMEs are not sufficiently taken into account, the process of setting European standards may work against the catching-up of Mediterranean cohesion countries, where the enterprise population is more dominated by smaller enterprises. At the same time, there are grounds for thinking that the winners from technical harmonization at EU level are companies in those countries which already have a strong standard-setting culture (such as Germany). Even amongst countries with strong standard-setting traditions there are marked differences. Companies in France, for example, are used to coping with national standards which are often less demanding than the equivalent standards in Germany. On the other hand, the conformity of products with standards is verified much more frequently in France than in Germany, with testing taking place, on average, once a year in France and every five years in Germany.

As consumer awareness rises, however, so does the need for standardization. An SME in a cohesion region which is less used to complying with standards than a competitor from the core countries can use the European standard as a marketing argument and, since compliance with only one standard opens up the whole Community market, costs should be limited. By the same token, however, competitive rivalry intensifies in its home market. At this stage there is little evidence as to whether the existence of new opportunities in a wider European market offset the increased threat faced in the home market. What is lacking is analysis of the way in which standards are used in practice and what effects they have on economic performance, market share or, cohesion. More systematic feedback is clearly needed, and CEN is considering how to set up a reporting system on the impact of standards.

Case study evidence indicates that, in the past, the interests of smaller producers were given insufficient attention. A case in point, which arose under the old standard-setting procedures when detailed specifications were the order of the day, was the setting of standards for lifts. The European lift industry consists of four big multinational suppliers and a very large number of small producers. These two groups operate in somewhat different markets. The MNCs concentrate on large projects with standardized lift cages and the small producers offer lifts for buildings with non-standardized cages. The Commission planned to propose a directive on the technical specifications lifts should respect throughout the Community. As a result of the active lobbying by the MNCs,

Table 4.8. Progress of mandated programme for 'new approach directives'

Directives	Standards		
	Ratified	Under approval	Under development
Simple pressure vessels	30	11	42
C93/319 (Projet de directive)	1	26	106
Safety of toys 88/378	8	1	9
Construction products 89/105	156	304	763
Safety of machinery (static, lifting, and mobility aspects) 89/392, 91/368, 93/44	41	234	540
Personal protective equipment 89/686	105	71	250
Non-automatic weighing instruments 90/384	1	0	1
Active implantable medical devices 90/385	14	17	41
Medical devices 93/42	4	49	108
Gas appliances 90/396	17	45	77
Explosives for civil uses 93/15	0	0	54
Recreational craft 94/25	9	10	37
Efficiency of boilers 92/42			8
Total	386	768	2,036

the proposed technical specifications closely reflected their interests. Adoption of this legislation would have threatened the survival of SMEs in that sector and, eventually, the project was abandoned.

In the 1980s the EU manufacturers of lawnmowers were very competitive on world markets. Then Denmark adopted a national regulation on the noise emission from lawnmowers. The Danish rule was much stricter than every other rule in the Community and obliged the European producers to design a model specifically for the Danish market. As there is a trade-off between noise emission and the efficiency of lawn mowers, the Danish model was not competitive on other markets. After the Danish initiative, another member state adopted legislation which was more demanding than that of the rest of the EU but less strict than the Danish legislation. As a result, producers had to adapt their product range to that new regulation. A proposal was then made to the Commission to set a standard at a European level that would require the noise emission to be reduced throughout the Union. This standard was seen by industry as a threat to their competitiveness on world markets. The view of the Commission is that uniform environmental rules for products and processes are not very helpful. From a competitiveness point of view, differentiated standards or voluntary commitments (like Eco-Auditing and Eco-Labeling) are regarded as superior approaches.

Through their effects on costs, quality, safety, and compatibility, standards offer substantial potential welfare advantages. The Commission is aware, however, of the possibilities of negative distributional effects. In the past, some moves to establish standards

were stopped out of concern that large and powerful producers would lobby for standards that would enable them to increase their market share at the expense of smaller competitors. More recently, steps have been taken to make the setting of standards more responsive to the concerns of SMEs and national differences in standard-setting cultures.

4.4.1.2. *Community policy to enhance implementation of regulations and standards*

Giving European standards an operational meaning involves a series of actions. First, for a Community standard to be effective there have to exist adequate testing facilities throughout the EU. At present, a map of decentralized testing (and also research) institutions throughout the EU is being established. This list of institutions will help avoid the unnecessary creation of new ones. A comparison with the map of industrial sites will show where the main gaps are and will underpin a strategy to enhance the endowment of European regions with these institutions. As the main gaps exist in some of the less developed southern parts of the EU, completion of this map will involve a series of investments that are pro-cohesive in character.

Second, once proper testing of products is ensured, either by independent institutions or by enterprises themselves, there also have to be bodies which then certify the test results and control the conformity of tested and certified products with the standards. A region's endowment with such a technical infrastructure for testing, certification, and control is an essential prerequisite for endogenous regional development and is also a requirement of inward investors. The Commission is initiating action by member states and regions in the field of quality policy, providing co-financing for the setting up of new institutions (DG XVI, DG XXIII, and PEDIP I), supporting related training programmes (DG V) encouraging a networking of existing institutions, and taking a more active approach to raising the public profile of these institutions. These activities contribute to economic and social cohesion, though their impact varies from the positive results under PEDIP I in Portugal¹⁶ to the less positive outcomes in the field of quality policy in Greece. (Organizing the partnership between the Commission, national governments, and regional players for these programmes is difficult.)

4.4.1.3. *Technical regulations, the single market, and cohesion*

A range of technical rules regulate the placing of categories of products on the internal market (safety rules for chemicals and pharmaceuticals and for protective equipment in construction, environmental protection, and interoperability rules in telecommunications). For example, 30–40 per cent of products are subject to safety regulations. The Commission has a coordinating role. What happens in one sector should be consistent

¹⁶ PEDIP I was a programme that implemented a protocol attached to the Act of Accession of Portugal to the Community. The programme involved the supply of technical and financial support to help 'modernize the [Portuguese] production sector and to adapt it to European and international economic realities'. Assistance was given firms accounting for 42 per cent of Portuguese industrial employment, but with an over-representation of firms with over 100 employees and of firms in modern (metals, electrical goods) industries, and an under-representation of firms with fewer than 50 employees and in traditional industries (textiles and forestry). The firms involved in PEDIP I were those that were more dynamic but that were also more vulnerable due to their higher rates of investment.

with what happens in another (e.g. vehicle emissions), and where regulatory principles exist they should be complied with.

The Treaty of European Union requires that member states should not take measures that undermine the internal market. The aim is to suppress measures inhibiting the free movement of goods as far as possible or to ensure, either through mutual recognition of equivalence or through the approximation of laws, that the internal market is not affected.

The principal measure through which the Commission seeks to monitor developments in member state regulation and preserve the internal market is through the information procedure of Directive 83/189, under which member states must notify the Commission and through it other member states of intended technical rules while they are at a draft stage. The Commission can ask for a three-month waiting period during which it can react, and if the proposal is of concern it can issue a detailed opinion which can extend the waiting period.

The information procedure reveals a large volume of detailed and complex national technical regulations concerning products, their specifications, their conditions of use, the tests they must undergo, and the certificates of approval they require. In any one year the number of regulatory measures adopted by the fifteen member states regularly exceeds the whole Community *acquis* (415 Community directives and regulations established in 35 years). Of some 1,136 draft technical regulations proposed in 1992–4, the Commission requested changes in about 526 and detailed opinions in 357. At the root of these requests is the view that divergent technical regulations fragment the internal market, and that onerous and complex regulation may for reasons that are real or imagined discourage the investment required to exploit wider European markets.

As well as fragmenting the internal market, national technical regulations could be viewed as anti-cohesive if restrictive regulations close markets to producers in weaker countries. In textiles, for example, German rules concerning the labelling of garments made from reprocessed textiles prevent the sale in Germany of products whose production involves the use of specific chemical processes (involving, for example, the use of arsenic compounds) widely used in other member states. The trade-off in these cases is complicated. Ecological and quality factors are determinants of the quality of life and increased quality standards across the EU would make EU industries less exposed to competition from low-wage countries. At the same time such measures erode the wage-cost dependent competitive advantage of enterprises in less developed areas.

Of the draft technical regulations notified to the Commission by the EU-12 over the three years 1992–4, most came from three countries. Germany submitted 21 per cent, the United Kingdom 21 per cent, and France 17 per cent while, in relation to their size, the Netherlands (9 per cent) and Denmark (7 per cent) provided more than their share (see Table 4.9). (These member states are the ones that have expressed most concern about the negative impact on industry of excessive EU regulation.)

Eighty-five per cent of the notifications came from five sectors: telecommunications equipment (29 per cent), agriculture and food products (17 per cent), construction (13 per cent), mechanical engineering (13 per cent), and transport (12 per cent). In the case of telecommunications, liberalization creates a need to replace the internal require-

Table 4.9. Technical regulations notified by member state 1992-4

	1992	1993	1994	Total	Share
Germany	65	80	98	243	21.4
United Kingdom	67	106	62	235	20.7
France	73	65	60	198	17.4
Italy	40	36	34	110	9.7
Netherlands	38	24	40	102	9.0
Denmark	28	18	34	80	7.0
Spain	12	15	25	52	4.6
Belgium	11	18	16	45	4.0
Greece	11	12	12	35	3.1
Portugal	12	7	7	26	2.3
Ireland	2	3	1	6	0.5
Luxembourg	3	1	0	4	0.4
Total EU	362	385	389	1,136	100.0

ments of former national monopolies by public specifications, as does the need for equipment to operate in a mixed environment in which new digital technology has to interoperate with differently specified national analogue systems. The risk is that a *de facto* differentiation of national digital networks may result. In construction there is a proliferation of different national rules (with 73 notifications from Germany and 29 from the UK) due to the difficulties of implementing the Construction Products Directive and agreeing harmonized European standards. What is more, difficulties in adopting European standards and the creation of national technical regulations are obstacles to implementing public procurement (public works and utilities) directives, impeding their purpose of opening up the market for works contracts and the construction products used in them.

In the expectation that the public procurement directives would have a negative impact on the construction sectors in cohesion countries and less developed areas, temporary derogations were allowed to facilitate adaptation. In these areas construction is a critically important sector, accounting for a very high percentage of the number of enterprises and employment. In some respects national technical regulation offers a degree of further protection for this sector though, as the data show, the main source of notifications is Germany and the UK rather than the cohesion countries.

4.4.2. Industrial policy and cohesion: Policies to develop industrial cooperation

The creation of a Commission unit in charge of industrial cooperation followed the G24 study on ways to promote investment in countries in transition and a 1992 Council resolution that invited the Commission to develop industrial cooperation with third countries (JO, C178 of 15 July 1992). In the 1994 Communication on an Industrial

Competitiveness Policy for the EU (CEC 1994b), industrial cooperation within the EU and with third countries was identified as a priority action. As many member state governments are disinclined to grant the Commission a significant degree of competence with respect to enhancing cooperation within the EU, for the most part industrial cooperation policies relate to collaboration with countries that are not member states.

4.4.2.1. *Actions with respect to industrial cooperation in the EU*

The Commission seeks to facilitate cooperation between European firms, especially where SMEs are involved. Within the limits set by the laws of competition and acceptance of the view that the initiative must lie with industrialists, a number of initiatives have been taken in consumer electronics, information technology, cars, and textiles and clothing.

A communication on subcontracting in the textile and clothing industries envisaged a set of actions and supporting measures in which the Commission with the help of a European forum of industrialists would endeavour to help subcontractors increase their competitiveness. An important element of this strategy was an increase in cooperation between subcontractors, distributors, and manufacturers. After the first forum in Madrid in 1992, a study on subcontracting in clothing in 1994, and another forum in Brussels, a series of pilot projects were implemented and round tables were organized in five member states (Belgium, France, Italy, Greece, Portugal) of which two are cohesion countries.

Further steps to improve industrial cooperation between customers and subcontractors include the development of regular statistical information on trends in subcontract activities; the production of a guide on the legal aspects of subcontracting whose aim is to improve contractual relations; and the development, in conjunction with the Union des Confédérations de l'Industrie et des Employeurs d'Europe (UNICE) and employers' organizations, of a professional code of practice and associated certification. A multilingual guide to sectoral terminology has been produced and is being further developed. In 1994 the Commission set up the Subcontracting Assistance Network (SCAN). The aim is to improve access to information about subcontract markets and its regularity and quality by interconnecting and making interoperable subcontract databanks in Europe. In 1992 the Commission published a directory of organizations representing subcontractors in Europe. This directory was updated in 1994. All of these actions are designed to improve the efficiency of subcontract industries and ensure that they function on a European scale. Measures of this kind create opportunities but also competitive challenges for subcontractors in less developed areas, while improving the terms of their contracts.

Of particular importance is the Trade and Electronic Data Interchange System (TEDIS) programme. This programme has launched over 150 projects aimed at deepening knowledge of EDI, stimulating its development and encouraging its implementation in Europe in ways ensuring that there are no sectoral or geographical barriers to trade and that the single market is not fragmented. Action has also been taken at an international level in close collaboration with international bodies, particularly the United Nations, to ensure that European companies can reach any partner anywhere in

the world using standard messaging. Further actions were designed to ensure the geographical and sectoral integration of EDI trading markets, and to promote awareness of EDI throughout Europe by creating a decentralized network of awareness centres with an emphasis on regional management and the involvement of SMEs.

While the initiatives that the Commission has so far taken to increase interfirm cooperation in the EU are relatively few, it is right to recognize the importance of such cooperation, especially for firms in less developed areas. An aspect of new technologies is their communicational character and the associated development of new intra- and interorganizational relationships. An important characteristic of the new principles of productivity associated with these technologies is that they are not simply additive. A global optimum is not necessarily the sum of a set of local optima. It is for this reason that organizations seek to integrate activities from the design of goods and services to their distribution into an interdependent system. These efforts to coordinate and integrate activities lead to the development of networks and management models whose characteristics include the fact that their domain extends beyond the firm, upstream to suppliers and downstream to customers. This development tends to stabilize the networks of upstream and downstream relations of firms and leads to the creation of partnerships with a reduced number of suppliers and subcontractors. A characteristic of these networks is that they are technical and not just commercial in character. In upstream just-in-time (JIT) systems, for example, medium-term cost control requires that stocks are not simply pushed back on to suppliers. To reduce costs, suppliers must themselves use similar methods of stock control. Moreover, quality and product specification considerations require tighter control over the suppliers' process of manufacture with, in some cases, direct control over manufacturing in the shape of distributed CAD and integrated CAD/CAM between a firm and a supplier. The clear implication is that in the years to come the survival and development of firms in less developed areas will, in some cases, depend upon their ability to meet the more rigorous requirements of their customers and establish relations of long-term cooperation with them.

4.4.3. Conclusion

Traditional industrial policies defined specific targets for industrial performance and capacity and used institutional, financial, material, and human instruments to attain these targets. Implementation involved joint action by public authorities and then industrial partners and its position. The aim was to control from above the coherence of the national economy within the world economy, in particular through a quest for an equilibrium judged desirable between different activities (sectors and *filières*). Current approaches to industrial policy differ. Decisions are left firmly in the hands of industrialists and policy action focuses on the creation of a competitive and supportive environment.

The liberalization of markets and the intensification of competition has led to a dramatic restructuring of European industry. Increases in productivity have not, however, been matched by correspondingly fast rates of output growth, with the result that industrial employment has declined and the economies of the EU have so far failed to reabsorb the human resources released as a result of productivity and structural change.

Industrial competitiveness policies have played a part in this process of liberalization. They also have helped put in place the support structures that were more weakly developed or absent in the less developed parts of the EU, thereby helping these enterprises to adapt to the internal market.

4.5. SME Policies and Cohesion

Enterprise policies (Article 130 of the Maastricht Treaty) are designed to improve the economic environment and promote the development of enterprises, particularly small and medium-sized enterprises. These measures, set out in the Commission report on the 'Coordination of activities in favour of SMEs and the craft sector' (CEC (1995c)) as well as the more recent 'Integrated programme for SMEs and the craft sector' (CEC (1996c)) and the 'Third multi-annual programme for SMEs' (CEC (1996e)), relate to a number of areas of Community responsibility set out in the Treaty of Rome but only institutionalized at a Community level from 1983 onwards.

SMEs have a flexible and more adaptable structure, enabling them to survive in turbulent economic environments more easily than larger firms (Cortes, Berry, and Ishaq 1987). They are a major source of employment in EU economies (CEC (1995b)) and leading employment creators due to their relatively high labour intensity. As Eurostat (1994, Table 2, p. 7) shows, in EU-12 in 1988-90, large enterprises increased their share of turnover by 6.9 per cent, yet reduced their share of employment by 1.2 per cent. On the contrary, micro-units (0-9 people) increased their employment share by 4 per cent. It should be stressed that SMEs (micro-units included) are particularly active in distribution and services. In 1990 in these two sectors SMEs accounted for 88.7 per cent and 77.6 per cent of employment and for 86.2 per cent and 85.0 per cent of turnover, respectively. Industry, conversely, is dominated by large firms, which accounted for 40.5 per cent of employment and 52.4 per cent of turnover.

SMEs face special difficulties (European Observatory for SMEs 1995). Of these difficulties the most important are the lack of start-up capital and of suitably skilled workers. The existence of a complex legal and administrative environment is also a serious obstacle to their development, as is a lack of information about important matters such as relevant R&D results, possible suppliers or customers, and joint interest in research, production, and distribution. The isolation of SMEs and their inability to search for partners because of scarce resources are further constraints.

Measures designed to help SMEs deal with these difficulties can be divided into horizontal and support measures. Horizontal measures include improving the legal and administrative environment in which SMEs have to grow. Simplifying matters and abandoning complex procedures are given priority, and higher aid thresholds are adopted. Support measures include: (1) financial instruments such as subsidized European Investment Bank (EIB) global loans, the SME facility introduced by the 1993 Copenhagen Council for loan subsidies, and loan guarantees from the EIB; (2) programmes and networks encouraging and supporting transnational cooperation between SMEs, namely the Business Cooperation Networks (BC-NETs), the Bureau de Rapprochement des

Entreprises (BRE), EUROPARTENARIAT, and INTERPRISE, as well as measures to enhance the dissemination of information about markets, customers, and the scope for cooperation through the Euro-Information Centres (EICs); and (3) pilot actions such as the Seed Capital Funds and Euromanagement RDT.

SMEs and especially micro-units are important from a cohesion perspective because they play a more dynamic role in employment creation than large enterprises (European Observatory for SMEs 1995, ch. 4). At the same time, SMEs account for particularly large shares of employment, especially in Objective 1 regions, while, insofar as industrial employment is concerned, SMEs are either more dynamic job creators or reduce employment more slowly than large enterprises in the majority of Objective 1, 2, and 5b areas.

The actual as opposed to the potential impact of SME policies on cohesion depends on the geography of the take-up of SME assistance and the consequent effects on the growth of SMEs. One complication is that the development of SMEs cannot be attributed to specific SME policies alone. Other policies, such as Structural Funds, or other programmes, such as LEONARDO, which supports vocational training, may also assist SMEs. The trends observed should be interpreted with this reservation in mind.

4.5.1. The impact of financial instruments

Table 4.10 sets out an index of the per capita use of individual loans and the allocations from ongoing global loans to SMEs in 1990–4 by member state. Belgium, Italy, and Denmark have the highest per capita indices, while UK, Greece, Spain, and Germany have the lowest. (SMEs may benefit from categories of EIB loans other than those specifically addressed to them, such as loans for regional development, but their effects cannot be measured.) The countries with the highest index of EIB loans, namely Belgium and Denmark, have the largest shares of employment in services (more than 68 per cent) in EU-12, while Greece, Spain and Germany account for some of the lowest shares of employment in services (less than 60 per cent). The UK, with 70 per cent of its employment in services, is an exception.

The SME facility, which provides an extra 1 billion ecus in subsidized (interest subsidy of 2 per cent) EIB loans, was established at the invitation of the 1993 Copenhagen European Council meeting. As Table 4.10 shows, the percentage of utilization up to 31 July 1995 was low in the cohesion countries, with Greece and Portugal, the poorest in terms of per capita disposable income, having the lowest take-up rates.

4.5.2. The impact of pilot actions

DG XXIII's Seed Capital pilot scheme designed to support private investment in new innovative enterprises, regional development, and job creation has backed the creation of twenty-three independent investment funds. These funds provide venture capital. In 1989–96 they supported the creation of 306 new innovative enterprises, creating 2,332 jobs. The distribution of funds, investment, and jobs by member state is shown

Table 4.10. SME policies in EU countries

Country	(1)	(2)	(3) Euromanagement		(5)	(6) Seed capital		(7)
	EIB	SME facility	No. of SMEs	% of proposals	Funds	Inv.	Jobs	
Belgium	72	97	60	10.9	2	20	96	
Germany	16	100	137	24.2	4	49	473	
Denmark	57	99	5	0	0	—	—	
Spain	16	82	100	10.3	3	47	292	
France	32	100	159	9.7	5	72	719	
Greece	16	17	65	9.1	0	—	—	
Ireland	20	80	40	0.6	1	24	136	
Italy	64	100	103	12.7	3	29	125	
Netherlands	20	100	26	1.8	2	24	136	
Portugal	36	21	40	3.6	0	—	—	
United Kingdom	4	100	112	5.5	3	41	355	
Austria			20	1.2				
Finland			20	4.8				
Sweden			40	5.5				
EU			927	100.0	23	306	2,332	

(1) Index of per capita value of EIB loans to SMEs in 1990–4. *Source:* 1994 EIB Annual Report.

(2) Percentage of utilization of SME facility until 31 July 1995. *Source:* DG XXIII.

(3–4) In 1995. *Source:* DG XXIII.

(5) Number of Funds (1996).

(6) Number of investments (1996).

(7) Number of jobs created (1996). *Source:* Seed Capital Advance Report 1996, DG XXIII and DG XVI.

in Table 4.10. Denmark and Portugal did not apply at the time of the initial call for tenders, while Greece dropped out of the scheme. On a per capita basis, Belgium and Netherlands seem to fare better than the rest. Of the four cohesion countries, only Spain, with three funds, is an active participant. Ireland has only one.

The Euromanagement programme, which was successfully introduced in 1992, was given a second launch in 1995. DG XXIII selected, trained, and funded on a 50 per cent basis forty-seven consultancies specializing in research, technological development, and innovation for SMEs. Their mission was to select 927 SMEs and implement a programme of strategic planning, analysis of needs, partner search, and assistance to design RTD projects for these SMEs during 1995. Almost 60 per cent of the assisted SMEs had fewer than 50 employees, while 58 per cent had significant RTD activities committing at least 3 employees per year to RTD. The four cohesion countries contained 26 per cent of the SMEs participating in the programme and generated 24 per cent of the proposals (Table 4.10). Both percentages are higher than the cohesion countries' share of the EU population (17 per cent).

Table 4.11. SME policies in EU countries: support for transnational cooperation

Country	BC-NET ^a	Publ.	Priv.	Sem.	BRE ^b	EIC ^c
Belgium	19	3	12	4	28	14
Germany	40	9	26	5	27	32
Denmark	6	1	4	1	4	8
Spain	35	17	17	1	54	25
France	41	15	17	9	67	32
Greece	18	6	10	2	23	11
Ireland	5	1	3	1	6	6
Italy	60	13	40	7	103	27
Netherlands	10	1	8	1	10	7
Portugal	13	4	8	1	19	12
United Kingdom	30	12	15	3	55	23
Sweden	6	2	2	2	6	9
Finland	6	1	2	3	2	7
Austria	7	0	6	1	4	7
EU	296	85	170	41	408	220

^a Structure of the BC-NET, number of members, Dec. 1996.

^b Number of correspondents, Dec. 1996.

^c EURO-Info Centres, Dec. 1996.

Source: DG XXIII.

4.5.3. Transnational cooperation

BRE and BC-NET were established mainly to help enterprises find new contacts in other European or third countries. These measures have been complemented by the INTERPRISE and EUROPARTENARIAT programmes as well as other by activities to encourage sub-contracting. In December 1996 BC-NET had 330 members, of whom 296 were in the EU-15. Seventy-one (24 per cent) were located in the four cohesion countries (see Table 4.11). Overall, 29 per cent of these enterprises were public, 57 per cent were private, and 14 per cent were semi-public. In the four cohesion countries, however, just 39 per cent of the members were private. As for BRE, Table 4.11 shows that in 1996 there were 408 correspondents, of whom 102 (25 per cent) were in the cohesion countries. The European Information Centres (EICs) network includes 220 members in EU countries. Almost 70 per cent of the network is located in eligible, peripheral areas, allowing links to be created among them as well as between them and central regions. The four cohesion countries (see Table 4.11) have fifty-four EICs (25 per cent), although Greece lost two and Spain lost one in 1996 due to rationalization. The EICs, which are recognized as 'first-stop shops', play a crucial role in easing SME participation in the internal market by providing updated information

to local SMEs, acting as technical advisers and facilitating SME participation in EU programmes.

4.5.4. Development of SMEs 1990-1

Eurostat's third report on Enterprises in Europe (Eurostat 1994), which offers detailed evidence of the development of SMEs by member state in terms of number of enterprises, employment, value added, and turnover, shows that the member states that fared better in all the SME schemes had an *ex ante* healthier development of their enterprise sector. The opposite applied to the least active participants.

Belgium and Denmark were strongly involved in the relevant schemes and improved in all the performance ratios of their enterprises.

In Belgium, enterprise productivity was 16 per cent higher than the EU-12 average in 1990. Turnover per person increased by 4 per cent between 1990 and 1991 (and by 15 per cent between 1988 and 1991). Distribution showed by far the highest turnover per person. The number of VAT units increased by 2.3 per cent in the same period. Of the 1994 labour force, 68.2 per cent was employed in services.

In Denmark, in 1990-1, the number of enterprises (with an annual turnover of more than 15,000 ecus) increased by 0.5 per cent (2.1 per cent in services), turnover per person increased by 5.8 per cent, and value added per person by 7.7 per cent. In 1991 service enterprises accounted for 71 per cent of Danish firms, 53 per cent of employment, and 62 per cent of turnover. Of the entire labour force, 68.4 per cent is employed in services. SMEs accounted for more than 80 per cent of employment, turnover, and value added in the sector.

In Portugal, which also participated actively in the relevant schemes, the number of enterprises increased by 50,000 or 8 per cent in 1990-1 (33 per cent in 1988-91). Employment increased by 13 per cent, and turnover by 8 per cent. As a result, turnover per person decreased. It declined by 2 per cent in manufacturing and 10 per cent in construction, but increased by 10 per cent in services. The rest of services, NACE 7-9, showed the strongest variation in 1988-91. The number of units increased by 68 per cent, employment by 17 per cent, and turnover by 59 per cent.

In Ireland, the data refers only to industrial enterprises (NACE 1-4) employing more than three persons and construction firms (NACE 5) employing more than twenty persons. In 1989-90 the number of units, employment, and net output increased slightly. Net output per person increased in 1987-89 by 22 per cent but decreased in 1989-90 by 5 per cent, although small establishments showed an increase.

In contrast to the four preceding countries, Greece, which seems to be the least active participant in the SME support schemes, shows a general decline. The information for Greece is not directly comparable to that for other countries, since it refers only to industrial (NACE 1-4) and repair industry (NACE 67) firms employing more than 10 persons. The service sector is not included. In 1988-91 turnover and value added per person declined by 15 per cent and 19 per cent respectively. Turnover per unit and value added per unit decreased by 20 per cent and 23 per cent respectively. The number of establishments was reduced by 2 per cent and employment by 7 per cent.

4.5.5. Development of SMEs and uptake of SME programmes

The evidence presented in this section suggests that there is a reciprocal relationship between the dynamism of the SME sector and involvement in SME programmes. Declining figures for Greece on all the performance variables examined may underlie a reduced interest or even potential to participate in schemes that support young, dynamic, and preferably technologically advanced enterprises. That services are not included in the statistics makes the comparisons awkward, but the fact that the service sector employs only 55.6 per cent of the Greek labour force (the lowest share in EU-12 in 1994) shows that services have lacked the dynamism required to counterbalance the negative trends in the industrial sector.

Conversely, Belgium, which is probably the most active participant in all SME schemes, shows a positive development trend with increases in productivity, employment and in the number of establishments (see also section 4.2). The young and dynamic enterprises created in Belgium seem to be able to exploit the SME support schemes. The same holds for Denmark. An extra advantage the two countries have is the relative importance of their service sectors.

Portugal, which also participated very actively in the SME schemes, exhibited a positive development trend as well. There was a dramatic increase in the number of new enterprises, and employment and turnover followed suit. Although services accounted, in 1994, for just 55.8 per cent of the labour force, the service sector participated dynamically in enterprise creation and increased its relative importance.

4.5.6. Conclusions

There are persistent differences in the extent to which member states take advantage of SME policies. These differences stem at least in part from three factors: (1) differences in the economic structure of the member states with large shares of employment in services generally playing a positive role; (2) differences in national development trends with the countries that are most dynamic in new firm creation being best placed to participate in SME support schemes; (3) the general performance, in terms of productivity and competitiveness, of the enterprise sector.

As far as the impact of SME policies on cohesion is concerned, it seems as if peripheral countries in which there is a strong dynamic to enterprise creation benefit from such policies with positive effects on cohesion. Other peripheral countries where economic activity is slowing down do not and possibly cannot benefit from such aid to the same extent and may secure fewer benefits than more developed member states.

The majority of regions to be assisted are in Portugal, Spain, Italy, Greece, and Ireland. They all seem to do well with the frequent exception of Greece. It does seem, however, that the general improvement of an economy should come first, and that once the potential for new enterprises to grow is strong there will be a strong uptake of Community policies. If SME policies do not make an equal contribution to income convergence in all member states, it is probably more due to differences in their economies than to policy inefficiencies.

4.6. Conclusion

Assessing the impact of competition, competitiveness, and enterprise policies is difficult because it is not easy to establish what would have happened in the absence of EU action. What one can observe is how well manufacturing in cohesion countries performed relative to other member states.

In 1992 the manufacturing industry accounted for 22.3 per cent of EU value added, services 65 per cent, construction 6 per cent, energy 4.2 per cent, and agriculture 2.5 per cent. The share of manufacturing was in decline, falling from 31 per cent in 1970 to 27 per cent in 1980 and 22.3 per cent in 1992. Germany was the country in which manufacturing accounted for the highest share of output (29.4 per cent). Portugal (29.8 per cent in 1990), Austria (25.9 per cent), and Ireland (27.7 per cent in 1991) were above the EU average. The lowest shares were for Greece (15.4 per cent), Spain (17.4 per cent), the Netherlands (17.9 per cent), and Denmark (18.8 per cent). The cohesion countries, therefore, fell at the two ends of the spectrum, with either relatively large shares of industry in output (Portugal and Ireland) or very low shares (Greece and Spain).

At present EU manufacturing is dominated by four large countries: Germany, France, Italy, and the UK accounted for almost four-fifths (78.9 per cent) of EU manufacturing output. Germany alone accounted for almost one-third. In 1980–92 the cohesion countries (excluding Ireland) dropped from 7.3 to 7 per cent, while the four leading economies saw their share increase from 78.4 per cent in 1980 to 78.9 per cent in 1992. Within this leading group there were, however, significant changes as the French and UK shares fell and the German and Italian shares increased. As far as output growth was concerned, Germany and Italy were the main winners.

Manufacturing employment was in decline, standing at 36.5 million in 1980, 31.8 million in 1985, 27.2 million in 1990 and 28.5 million in 1995. As in the case of output, the four large member states dominate employment, with more than one-quarter of all manufacturing jobs in Germany alone. In 1980–95 a small decline of 1.3 per cent in the share of the four largest countries was accompanied by small increases in the small, older members (especially Denmark and the Netherlands) and three of the cohesion countries, whose share rose from 11.5 per cent in 1980 to 12.2 per cent in 1995, though Spain's share declined from 1992–5.

Although the trade balance of the member states is not a good indicator of comparative national economic performance, it is of value in identifying the trajectories of different member states. In the 1990s the trade balance of the EU increased five-fold, approaching 4 per cent of Community GDP in 1995 (238.8 billion ecus). In 1995 all member states exported more than they imported except the UK (-1.3 per cent of the Community trade balance or -0.4 per cent of UK GDP), Greece (-3.2 and -8.9 per cent respectively), and Portugal (-3.5 and -10.4 per cent). In 1995 West Germany accounted for 59.3 per cent of the EU surplus, lying well ahead of Italy (12.1 per cent) and France (10.1 per cent).

What this data suggest is that Germany, Italy, and France were the principal beneficiaries of increased international competition in the 1980s and 1990s. The increase in

their exports outstripped increases in import penetration more than in any other member states. The cohesion countries, conversely, saw their deficits rise sharply in the second half of the 1980s. A sustained deficit implies a transfer of output and employment to surplus countries. Indeed, in the 1980s and early 1990s the value of output did increase faster than average in some of the larger and richer member states, though their share of EU manufacturing employment declined due to shifts in specialization towards activities with a greater value added per person employed.

A further factor which shaped the geography of output and employment was the map of international investment. In the 1980s there was a large increase in inter-firm agreements, mergers, and alliances, and a sharp increase in direct foreign investment in EU countries. In 1990 direct overseas investment in EU countries reached \$98.4 billion, compared with \$14.8 billion in the early 1980s, increasing some three times more than gross domestic fixed capital formation, though in most of the large EU economies outflows exceeded inflows. In 1990 in the UK, inward investment accounted for 17.3 per cent of investment.

Most of the inward investment was directed from and towards the United Kingdom and France. The Netherlands, Benelux, and Spain received large volumes of inward investment. For its size Germany attracted relatively little inward investment, due perhaps to a desire to ensure domestic control of German industry and the competitive strength of German producers, though it was, with the Netherlands and Benelux, an important capital exporter.

If, however, inward and outward investments are measured relative to GDP, a somewhat different picture emerges. Since 1980 the most important recipients of inward investment were Belgium, the UK, and the Netherlands, followed by Portugal, Spain, and Greece. Next came France, Sweden, and Ireland. Three cohesion countries were, therefore, relatively important recipients of inward investment. Finland had the lowest inward investment relative to its GDP, followed by Germany, Italy, and Austria.

With the exception of Spain, capital export was insignificant from the cohesion countries, implying a limited degree of internationalization of indigenous industries. (Portuguese overseas investment did increase as a percentage of GDP in the early 1990s.) The Netherlands, the UK, Sweden, and Belgium topped this list. A second group was made up of Finland, France, and Germany, which were followed by Denmark and then by Italy and Austria.

In the period from 1980–92, therefore, the absolute volume of direct inward investment in the cohesion countries was comparatively small. In relation to GDP, however, the cohesion countries received quite a large share. Direct overseas investment by cohesion country enterprises was, however, relatively weak, though there were significant differences among the stronger countries with key industrial countries such as Germany and Italy attracting and undertaking much less overseas investment than countries such as the United Kingdom and the Netherlands.

The four large member states—Germany, France, Italy, and the UK—accounted for more than 70.5 per cent of extra-EU goods exports (compared with 65.8 per cent of all exports), and Germany alone accounted for 28.3 per cent. The cohesion countries

accounted for just 1.5 per cent. Amongst the large states, the share of the UK was in decline. The share of Greece and Ireland and of the cohesion countries as a whole increased a little over the period from 1970, though Greece of the cohesion countries together with Austria and the Nordic countries are, perhaps, also well placed to develop future links with Eastern and Central Europe and the CIS.

The evidence on trends in GDP per head indicates that in the 1980s and 1990s three of the cohesion countries converged, and in this sense their competitiveness increased. In manufacturing, however, the position was mixed with a fall in their share of output but a small increase in their share of employment. Three of the four cohesion countries were relatively important recipients of inward investment, though their export sectors remain weakly oriented towards non-EU markets, reflecting their specialization in industries oriented towards the internal market.

It is far from easy to identify the impact of EU competition, competitiveness, and enterprise policies on these changes in relative economic performance. What this chapter has highlighted, however, is that, in a context of market integration, the EU has put in place measures (whose take-up is variable) that seek to support and facilitate the adaptation of weaker regional and national economies to the internal market. The EU has sought, in particular through the regulation of state aid, to ensure that a European perspective acts as a counterweight to national perspectives on cohesion.

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