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Disciplining State Aid in the EU

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Abstract

The purpose of the study is to examine if the use of state aid in the EU have increased or decreased and especially the use of state aid to support the manufacturing sector. The development of total state aid in relation to GDP and sectoral distribution of total aid are studied. So is state aid to the manufacturing sector and its different objectives and forms, since this sector is granted a large share of total state aid in the EU and also have the potential largest impact on trade and competition. There is a downward trend in total state aid in relation to GDP, but aid levels to the manufacturing sector have increased, due to elevated levels in five out of fifteen countries. Aid to horizontal objectives is considered being less distortive to competition and the proportion of aid to the manufacturing sector directed towards this objective has increased.

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1. Introduction

1.1 Aim and scope of the study

State aid, a form of government intervention, is given by member states to companies or regions that are in need of support. It can be granted in different forms such as for example tax reductions, subsidies and investments, but has to comply with the rules established by the member countries, to ensure that the competition within the European Union is not distorted. There are however a few cases where the rules do not apply and they are presented in the Articles 87-89 of the EC Treaty.

The countries in the EU have all used state aids to various extents in order to support domestic production or regions. Their distortive effects and high levels in some sectors came into focus at the Lisbon and Stockholm European Councils in 2000 and 2001. The main goal has since then been to restrict the use and levels of all kinds of state aid as much as possible and to make the system more transparent. This in order to make Europe more competitive, increase productivity and deliver sustainable growth (European Commission, 2002 and 2004e).

The Commission of the European Communities, (henceforth the Commission), has recently launched an action plan in order to reduce state aid targeted particularly to the private sector. The aim is to reduce these levels of state aid and to target the aid better, mainly towards small companies, risk capital and research and development. Even though the levels have diminished over the years, they are still estimated to be high enough to distort competition. Financial Times describes how the use of state aid often is a method used to avoid having to implement necessary structural reforms at a national level and how a reduction of state aid may indirectly stimulate economic reforms and growth (Financial Times, 2005).

One purpose of this study is to examine if the development of total state aid in countries and sectors in the EU and the distribution of total state aid between countries and sectors in the EU have changed over the last ten years. Another is to take a closer look at aid to the manufacturing sector to determine if the objectives and forms of aid have changed during the same period. The effects of government intervention on trade and competition will also be

examined. The study focuses on the manufacturing sector since it is a large recipient of state aid and covering all sectors would be too extensive.

I will look at:

- The development of total state aid in the EU between 1981 and 2002.
- The sectoral distribution of state aid between 1990 and 2002.
- The distribution of state aid to the manufacturing sector in the member countries between 1990 and 2002.
- The distribution of state aid in the manufacturing sector according to objectives between 1992 and 1999.
- The distribution of aid instruments in the manufacturing sector between 1990 and 2002.

1.2 Disposition

After the initial presentation of the aim and scope of the study, state aid as a concept is presented and explained. The background and different types of state aid are examined and so are the legal basis and the control mechanism. The next chapter presents the theoretical aspects and the effects of state aid on trade and integration. In the following two sections state aid is examined in a variety of ways. First, to get an overview, the main development of total state aid in relation to GDP and the sectoral distribution are presented. Second, state aid to the manufacturing sector and its distribution, breakdown by objective and aid instruments are examined. There is also a brief presentation of state aid in the ten new member states of the EU. Finally, the last chapter presents the summary and conclusions.

2. State aid – definitions and forms

Industrial policy can be defined in different ways, but a broad economic definition according to Curzon Price might be: “all acts and policies of the state to alter the allocation of resources between sectors” (Curzon Price, 2001, p. 203). The types of policies included differ, but generally they are specifically targeting a sector of economic activity or a type of product. Usually policies such as fiscal, competition, regional, social, environmental and so on, are not included in industrial policy. Being more general they are referred to as horizontal policies by the EU, but they can be included in a broader definition of industrial policy. There are different ways to categorize industrial policies and one of them is to distinguish between firm-specific, sector-specific and general industrial policy. Different kinds of industrial policies have been popular during different time-periods and there have been big changes in the way to look at and implement government intervention over the last forty years (Curzon Price, 2001, pp. 203-204).

In the 1960s and the early 1970s there were not much need for any kind of government intervention in Western European industries. Only a few sectors were in need of state aid and the Commission did not have the same role as it has today when it came to enforcing regulations. Instead it set up some guidelines concerning the use of state aid. In the 1970s and early 1980s the European states took a much more active role in aiding firms in difficulties due to the recession prolonged by the two oil crises and the changing patterns of comparative advantages in the world economy. The state aid mainly took the form of direct subsidization of loss-making firms and the Commission did not immediately see the problems connected with this kind of intervention. However in the late 1970s the Commission finally took a more active role in ensuring the competitiveness of the European industries and restricted the use of subsidies and other forms of state aid. In the late 1980s the EU created a genuine single market with, among other things the launch of the EMU, which made it more important than before to make sure that competition was not distorted by extensive use of aid by the member states (Curzon Price, 2001, pp. 212-214). In the late 1990s and the early 2000s, there has been an ongoing dialogue between the European Council and the Commission in order to reduce the levels of state aid and redirect them towards horizontal objectives of Community interest, (i.e. aid that is not targeted towards specific sectors or geographic areas). The objectives are for example employment, training and research and environment. The focus has also been on

improving the effectiveness of state aid control and to reinforce control mechanisms. At the Lisbon and Stockholm European Councils in 2000 and 2001 the member states agreed to reduce their levels of state aid in relation to GDP by 2003 and to improve transparency of state aid policies (European Commission, 2001b, p. 6).

2.1 Industrial policy

Industrial policy in its different forms is used to help and support sectors, industries or regions that are in difficulties. There are a wide variety of situations where government intervention can take place such as general market failure, supporting infant industries, creating industrial agglomerations and as support to research and development. If state aid is the chosen instrument, it will take different forms in the different situations, but with the common goal to correct market imperfections, to offer support and to create a favourable environment for domestic industries. Once industries or regions become dependent on state aid, they most likely have problems adjusting when the funds are discontinued. The process of allocating state aid has become politicized and a decision of discontinuation might become difficult and in some cases impossible to make for political reasons (Curzon Price, 2001, pp. 204-210).

One problem associated with industrial policy is the question of what industries or which sectors to support and who is best qualified to make these decisions. According to Krugman, 1996, pp. 12-13, there is a strategic approach to industrial policy that can benefit a country. Specific sectors, where industries have higher returns to capital and labour than in other sectors, can be favoured, since an advantageous policy for those kinds of industries can help raise national income for the entire country. Sectors where industries generate profitable externalities that could be in the form of, for example, knowledge or innovations that can generate valuable spillovers can also be favoured. There are however problems associated with this kind of strategic industrial policy. Identifying the strategic sectors can be very difficult and the sectors that end up benefiting from governmental support are competing for scarce resources. Another problem is the complexity of industries, which makes it difficult to assess the total and final effects of industrial policy. In the end governmental policies might support industries producing unwanted spillovers, or at least not the desired ones, due to these problems (Krugman, 1986, pp. 1-22).

2.2 Types of state aid

There are many different ways to categorize state aid and one is to break it down according to objective or sector. Aid to the manufacturing sector, (the sector examined in this paper), can be classified as follows according to the European Commission:

Horizontal objectives

- Research and development
- Environment
- Small and medium-sized enterprises
- Trade
- Energy saving
- Rescue and restructuring (not limited to certain sectors of the economy nor to certain regions)
- Other objectives

Particular sectors

- Shipbuilding
- Steel
- Other manufacturing sectors

Regional objectives

- Regions falling under Article 87(3) a
- Regions falling under Article 87(3) c

(European Commission, 2001a, p. 32).

Aid to horizontal objectives is aid that is not earmarked for a specific sector or region and is usually considered less distortive to competition than other types of aid. It can target many different areas, but the most common ones are listed above. Aid to specific sectors, including aid to help rescuing and restructuring companies, is on the other hand considered the type of state aid most likely to distort competition. Aid to regional objectives include supporting regions in member countries that are suffering from low living standards or unemployment, or granting aid to facilitate economic development of activities or areas in need (European Commission, 2004e, p.19). State aid can also be granted on an ad hoc basis to support special projects in need of assistance.

Aid approved according to guidelines, where the primary objectives are for example regional or environmental, may also be supporting secondary objectives such as research and development. This makes it difficult to measure the total effects of a change of focus in state aid policies, since the aid can take many different paths to reach its final destination. Consequently it is only possible to make observations concerning the effects of changes of focus in state aid policies of aid to primary objectives (European Commission, 2001a, p. 32).

2.3 Legal basis

The legal basis of all of the EU competition policy is found in the Articles of the EC Treaty, (Articles 87-89 concerning state aid). It is also found in the Regulations and Directives adopted by the European Council and the Commission. The Commission is the institution responsible for implementing competition law at the EU level and is assisted by the national competition authorities for implementation in the member countries. The state aid policy, which is a part of the EU competition policy, includes targeting aids to public enterprises and enforcing repayment of illegal aid (Sauter, 2001, pp. 190-197).

Articles 87-89, (formerly Articles 92-94), of the EC Treaty set the rules for state aid in the EU. The purpose of Article 87(1) is to prohibit the distortion of competition in the common market by the industrial policies of the member states concerning state aid. Articles 87(2) and 87(3) state however a number of areas and projects where state aid is compatible with the common market and does not distort competition in a prohibited way. Article 88 states that the Commission shall 'keep under constant review all systems of aid' in the member states. It also gives the Commission power to make the decision, whether competition has been distorted or not, when state aid has been granted by any member state. The member states are obligated to follow the decisions made by the Commission and article 89 gives the Commission permission to propose regulations needed to ensure the proper application of Articles 87 and 88 (Curzon Price, 2001, pp. 211-212). For the complete version of Articles 87-89, see annex 1.

According to Article 87 of the EC Treaty any form of state aid is prohibited if it distorts, or even threatens to distort, competition. There are however exceptions if the total effect on the EU of the aid granted is positive enough. The first example is stated in Article 87(2): State aid

that is compatible with the internal market, such as social aid to consumers and relief aid in case of disasters. The second is listed in Article 87(3) and includes aid that the Commission can allow if it is compatible with the internal market, such as regional and sectoral aid (Sauter, 2001, p. 193). The types of state aid allowed are thought to have a beneficial impact on the EU as a whole and are listed below:

- aid having a social character, granted to individual consumers;
- aid to make good the damage caused by natural disasters or exceptional occurrences;
- aid designed to:
 - promote the economic development of underdeveloped areas (regarded as particularly backward in accordance with Community criteria);
 - promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;
 - facilitate the development of certain activities or areas,
 - promote culture and heritage conservation;

(where in the last two cases, such aid does not affect trading conditions and competition in the Community to an extent that is contrary to the common interest.) (European Commission, a).

State aid can be granted in different forms: direct subsidies, capital investment, selective tax breaks, loan guarantees, sales of assets to businesses below a reasonable market price, purchases from companies above a reasonable market price, state grants, interest relief and so on (Martin, 2001a, p. 137 and European Commission a).

2.4 Control mechanism

The member states have given the supervising role to the European Commission and its task is to make sure that state aid granted by member states is compatible with the regulations stipulated in the EC Treaty and with the EU state aid legislation (European Commission, a). The Commission ensures that competition in the EU is not distorted and that only state aid absolutely necessary is permitted. It also supports the economic development and employment in the Union and improves the living standard and quality of life for its citizens in only allowing state aid that has a positive impact on the Union as a whole. The member states have an obligation to report to the Commission when they are planning on granting state aid and await its decision on whether it is compatible with the legislation of the EU or

not before implementing it. If they neglect to do so, the Commission can investigate any aid granted without notice by member states and if it is found to be illegal, the Commission can impose on the country in question to demand the funds back from the recipient. Over the years the Commission has shifted towards a tighter state aid control to ensure that the aid granted serves the common interest of the EU. The Commission is also working to reduce the levels of state aid and to increase transparency in order to reach the goals set at the Stockholm European Council in 2001. Concurrently with the increased economic integration in the EU, there has been an augmentation of areas where control of government intervention is necessary in order to reduce inefficiencies. This control mechanism is vital to ensure that the benefits of the internal market are not affected by government intervention whenever market imperfections arise (European Commission, 2000, pp. 30-31, 2001a, pp. 9-10, 2001b, p. 6).

3. State aid and economic integration

There are different opinions on the consequences of the EU state aid policy. According to the literature on *strategic trade policy*, government subsidies are granted in order to raise consumer and producer surpluses. The conclusion is that countries are better off if they refrain from using this kind of government intervention since it is only a form of rent shifting. It is not certain that state aid given to domestic firms by one state distorts competition between the member states and a demonstration of the existence of damaging externalities is necessary in order to prove this assumption. In the literature on *public financing* tax-levels play an important role when it comes to attracting firms. Governments try to create the most favourable environment for companies by granting state aid in forms of, for example, tax exemptions or reduced levels and this generates fiscal externalities. According to the *economic geography* literature, government intervention can only be justified when there is imperfect competition or unemployment as a result of the location of firms. The externalities created from the location of economic activity are suggested to be internalized, but an effective method is yet to be brought forward (Besley and Seabright, 1999, pp. 20-23).

One dilemma concerning state aid is that there is no easy distinction between the kind of aid that rectifies market failures and the kind that imposes harmful externalities on other countries, since it is impossible to separate the location and production decisions of firms. A co-ordinated international state aid control-mechanism is one way to try and come to terms with this problem. A complete eradication of externalities imposed on other countries as a result of state aid is not possible though, if state aid is not prohibited all together (Besley and Seabright, 1999, pp. 34-35).

3.1 Effects on integration

The effects on the internal market and the economic and monetary union of the EU caused by government intervention are far-reaching and have repercussions in many different areas. The use of state aid to manufacturing has economic effects and affects both trade and competition, not just in the country that is applying it, but also in the EU as a whole and in non-member countries.

Economic integration can be defined in different ways, but according to Balassa, one is to view it as a process and as a state of affairs. As a process it implies different ways to abolish economic discrimination between states and as a state of affairs it implies a lack of various forms of discrimination between states. This implies that trade initially exists between the participants in the integrated area, since without trade there is no discrimination to overcome (Balassa, 1962, p. 1).

Market integration affects the market structure and makes many industrial sectors more concentrated with firms being forced to close down or reallocate in order to survive. The danger lies in member state governments trying to save local firms with different forms of intervention instead of letting the necessary structural reorganization take place. In the EU this is a problem if more-developed member states are able to support their industries to a larger extent than the less-developed member states. This creates, not only market-distortions, but also problems with the political support of the market integration. To prevent this from happening, the EC Treaty contains regulations concerning different forms of government intervention, including state aid (Martin, 2001b, p. 229).

Only certain kinds of market failure justify the use of state aid from an economic point of view and this is regulated in Article 87(3) of the EC Treaty. Different kinds of aid target different kinds of market failures. Horizontal aid is given to firms that are affected by market failures independently of their location or sector of activity. A dilemma concerning this and other kinds of aid is that it could be used as operating aid to cover normal firm-specific operations instead of covering the costs caused by the market failure. It is also possible that if all member states provide state aid to their own firms, it will neutralize the potential competitive advantages some of these firms were to have. The result is that funds are unnecessarily distributed without producing the wanted results, instead of being put to better use elsewhere (Martin, 2001b, pp. 226-228).

There are sectors of the EU economy that are in need of restructuring and in order to reach market equilibrium, the number of firms need to be reduced, causing unemployment. In an attempt to address this kind of problems, state aid is granted to facilitate the restructuring process and to keep workers employed, but instead there is a risk of slowing the whole process down. For market integration to work properly and successfully, the most efficient firms are needed to stay in the market, while the less efficient ones either exit or restructure.

Government subsidies can affect this process and allow for less efficient subsidized firms to stay in the market, while more efficient firms are forced to exit since they cannot compete on equal terms (Martin, 2001b, pp. 230-231).

3.2 Trade effects

The levels of state aid to industries will have an impact on trade and specialization in the integrated area. Trade creation implies that the consumption of more expensive domestic products is declining at the expense of cheaper products from partner-countries within the economic union. This leads to reduction or elimination of domestic production and an increase in imports from the partner-countries. Trade diversion implies that imports from a country outside the economic union are replaced with imports from a partner-country within the union. This leads to reduction or elimination of imports from the original country and a change in trading patterns (Robson, 1998, p. 19).

If state aid is used as a form of government intervention it will have implications on both trade creation and trade diversion and it will affect the balance of the economy in the entire union. If state aid is granted to an industry within the EU, that industry is given an advantage compared to other industries in the same line of business, both in the home-country, the EU as a whole and the rest of the world. The country subsidizing its industry limits import penetration for that type of products from partner-countries or countries outside the union, where the same industry runs without the help of state aid. Competition is distorted when industries in different countries are not competing on equal terms and the countries not supporting their industry lose export possibilities and revenues. Consumption in member countries not supporting their industry with state aid is also affected by trade creation. It will be cheaper to import subsidized products from another member country than to consume domestic non-subsidized products.

State aid levels also have an effect on whether a member-country chooses to import from partner-countries or countries outside the EU. If the government of a partner-country is subsidizing domestic production it creates an unfair competitive situation, where the partner-country can export at a lower price than the rest of the world. According to Robson, 1998 trade diversion is created when exports are diverted from an external country to a partner-

country and the producers outside the EU lose market shares. Trade patterns may change as a result of the subsidization of industries (Robson, 1998, p. 19). State aid can also have a negative effect on trade in the world outside the EU when subsidized products from the union at times compete unfairly with non-subsidized products in the world market.

Trade effects will affect trade patterns both within and outside the economic union and the use of state aid may lead to much needed restructuring operations in aided companies being delayed or neglected. In the end this causes problems for the entire European economy. State aid might also influence the supply-curve when subsidized industries produce excess supply and create a market-imbalance. It is no longer only demand that affect the production decision, but also the amount of state aid granted towards the industry.

4. Development of total state aid and sectoral distribution

Figures concerning state aid both, in general and to the manufacturing sector, are difficult to interpret. There is no certain way to determine what is included in the figures from various sources, since they do not always reveal this information and sometimes use different criteria when it comes to defining the limitations of categories and sectors. The problem is also to find one source that supplies figures for the entire time-period, so in order to get the data needed, figures in the same tables have frequently been collected from different sources. Many times there are time gaps where no data could be found.

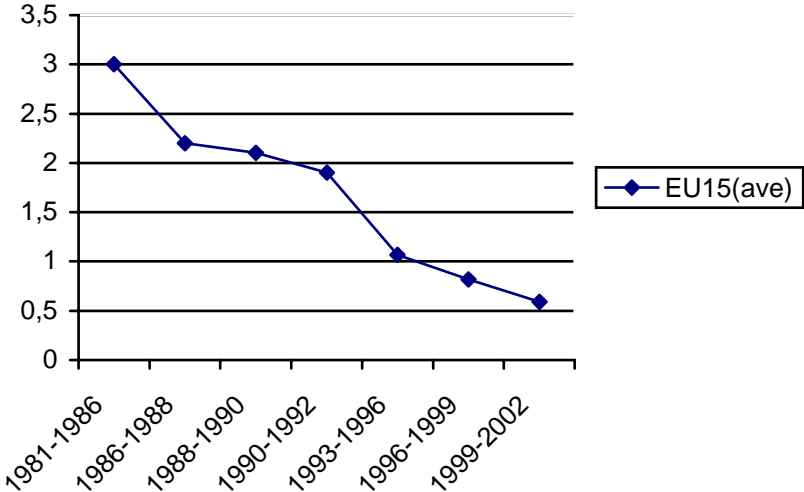
The reason for using mainly overlapping three-year averages in the tables is that it gives a more accurate picture of the overall trends than if you only use data for specific years. Furthermore figures released close to the publishing date are many times to some extent provisional and have to be revised in later studies.

4.1 Average trend of total state aid

The first questions that need to be answered is how total state aid in relation to GDP have developed in the EU over the last 20 years and if a clear trend can be detected during that time? To get an overview, total state aid as a percentage of GDP between 1981 and 2002 has been calculated. The data used in figure 1 originate from table 2 in annex 2, where data concerning the different member countries also is presented. There is however a distinct difference in the figures from the various sources. State aid as a percentage of GDP is consistently at a higher level between 1981 and 1992 than between 1993 and 2002. The disparities could be explained by the fact that the later figures present total state aid, aid to railways excluded and there is no such note concerning the earlier figures. The sharper decline in aid levels in relation to GDP in the EU after 1992, from an average of 2,3% (1981-1992) to an average of 0,8% (1993-2002), can also be explained by the completion of the internal market in the EU in 1992, (see table 1). According to Emerson et.al. the decline can be linked to the result of a more effective monitoring and implementation of rules put in place to prevent government intervention to escalate, when national industries were exposed to the more intensive competition of the internal market (Emerson et.al. 1988, p. 179). As can be

seen in figure 1 the levels of state aid as a percentage of GDP in the EU 15 are however declining significantly and a clear downward trend can be seen if you look at the averages during the entire time period examined (1981-2002).

Figure 1: Total state aid in relation to GDP (%)



Source: Figures for 1981-1992: European Commission, quoted from Curzon Price, 2001. Calculations for 1993-2002 are made from data from the European Commission, 2004a. (See table 2 in annex 2).

One of the goals set by the member states at the European Council in Stockholm in 2001 was to bring about a downward trend in state aid in relation to GDP by 2003. According to the European Commission, the trend is declining if you compare the periods 1998-2000 and 2000-2002. Their calculations show a decrease in total state aid levels less railways from 0,67% to 0,57% of GDP during the period in question and 14 out of 15 member countries could present a downward trend (European Commission, 2004e, p. 11).

4.1.1 Country differences

The next questions to examine are if the downward trend in total state aid in the EU is evenly distributed among the member states and how the economic growth of the member states is affecting the levels of state aid in relation to GDP? Data for specific member countries are presented in table 2 in annex 2 and reflects the disparities between the member states in state aid levels. The average level of total state aid in the EU 15 between 1981 and 2002 was 1,7% of GDP and the countries above that level were Belgium, Germany, Greece, Ireland, Italy and

Luxembourg. Looking at the long-term trend, levels of state aid as a percentage of GDP diminished between 1981 and 2002 for all member states, as well as for the entire EU.

Comparisons between the member states are also made after 1995 when Austria, Finland and Sweden became members. The trend of state aid levels between 1996 and 2002 was also diminishing, except for in Ireland and Denmark where an increase in the share of state aid could be seen. According to the Commission, the increase in Ireland was mainly caused by the inclusion of figures covering the Irish corporation tax. In 1998 the Commission decided it was considered state aid and since then those figures have been included in Irish aid levels. In the case of Denmark, the raise in state aid relative to GDP can be explained by, among other things, an increase in aid to employment creation and safeguarding the environment (European Commission, 2001a, pp. 12-16 and 2004e, pp. 4-5).

Table 1: Average of total state aid in relation to GDP and increase in GDP (%)

	Average 81-92	Average 93-02	Increase in GDP 1990-2002
Austria	-	0,8	17*
Belgium	3,1	0,6	26
Denmark	1,1	0,9	37
Finland	-	1,5	31*
France	2,2	0,9	24
Germany	2,5	1,3	14
Greece	3,1	1,0	35
Ireland	2,9	0,9	129
Italy	3,6	0,9	20
Luxembourg	4,5	0,5	83
Netherlands	1,2	0,5	35
Portugal	1,6	1,3	34
Spain	1,9	0,8	36
Sweden	-	0,4	23*
UK	1,2	0,3	56
EU 15 (ave.)	2,3	0,8	37

*Source: Calculations for averages are made from table 2 in annex 2. Calculations for increase in GDP are made from figures from the European Commission, 2004f. * Data only available from 1995-2002.*

There has been a convergence in levels of state aid relative to GDP between the member states over the period. In 1981-1986 the levels differed from 6,0% for Luxembourg to 1,3% for Denmark, a difference of 4,7%, while in 1999-2002 the difference was only 1,1% between Finland at the highest level, 1,3% and the UK at the lowest level, 0,2%. The countries showing the largest reduction in state aid levels as a percentage of GDP between 1981 and 2002 are Luxembourg, Italy and Ireland, but then all 15 member states are not part of the

comparison. If you look at the reduction of levels between 1996 and 2002 instead, Italy, Greece, Finland and Portugal are in the lead.

When discussing state aid as a percentage of GDP it is however also important to consider the effect of the trend in GDP itself. According to the European Commission, a high economic growth can disguise an increase in state aid levels and a downward trend in state aid in relation to GDP can still be shown (European Commission, 2004e, p. 11).

According to table 1 the only countries with an increase in GDP between 1990 and 2002 above the EU 15 average of 37% were Ireland, Luxembourg and the UK. Only Luxembourg can show a large reduction in state aid as a percentage of GDP during the same period according to table 2 in annex 2. The absolute levels of state aid in Luxembourg reveal no increase, but instead a quite steady level and even a slight decrease. The UK shows moderate reductions in levels of state aid as a percentage of GDP and in absolute numbers state aid increased steadily until 1998 and has declined since then. In Ireland the increase in both absolute aid levels and GDP could cover a decrease in state aid in relation to GDP, but instead the figures show an increase. To summarize the reducing levels of state aid in relation to GDP during the time period does not seem to be concealing increased absolute aid levels. (Absolute levels of state aid from European Commission, 2004a).

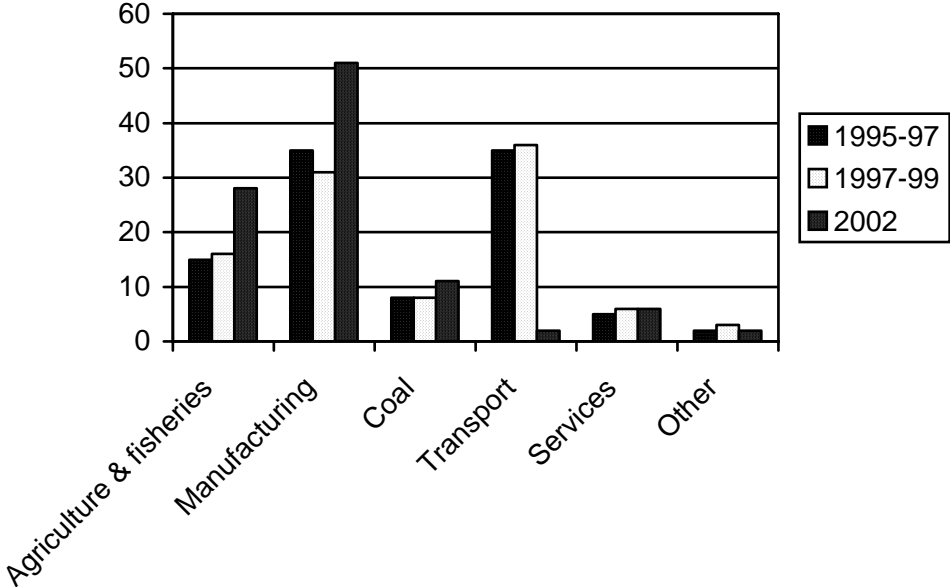
4.2 Sectoral distribution of state aid in the member states

The question that arises now concerns the sectoral distribution of aid and its effects on trade. What sector receives the largest proportion of state aid and does it differ between the member states? To get an idea of the homogeneity of the dispersion of state aid in the member states and in the entire EU, it is necessary to look at state aid to different sectors. The incentive for granting state aid vary between the different sectors and is more likely to be stronger when it comes to supporting for example manufacturing, rather than services. Supporting the former has an effect on trade through exports and imports and thereby involves greater financial gains, while supporting the latter have a greater influence on the domestic market.

Tables 3 and 4 in annex 2 cover most of the period between 1995 and 2002, but there is a lack of complete data from earlier years and between 1999 and 2002. To make a comparison

possible, the sector employment and training in 1995-1999 is assumed to correspond to the sector other non-manufacturing in 2002 since the other sectors seem to be categorized in an identical manner, leaving the last sector with the remaining data. The EU 15 average is presented in figure 2, while the country specific data is presented in tables 3 and 4 in annex 2.

Figure 2: Sectoral distribution of total state aid (%)



Source: Figures for 1995-99: European Commission, 2001a. Figures for 2002: DG Competition, quoted from European Commission, 2004e. (See tables 3 and 4 in annex 2).

The general distribution of state aid between the sectors show that the manufacturing and the transport sectors were generally receiving the largest proportion of state aid in the EU between 1995 and 2002, (if the problematic data for transport from 2002 discussed below is disregarded). The agriculture and fisheries sectors were in third place followed by coal, services and other sectors, granted only between 2% and 11% of total state aid in the EU.

The trend in the EU 15 during the same time period show an increase in state aid levels to agriculture and fisheries, manufacturing and to some extent the coal sector at the expense of aid to the transportation sector. The manufacturing sector received by far the largest share of state aid (51%) in 2002, an increase by 20% from the figures covering 1997-99. The agriculture and fisheries sectors followed with an increase during the same period of 12% and reached 28% in 2002. The transport sector experienced a big decrease in state aid levels instead from 36% in 1997-99 to just 2% in 2002. The reason for this might be the lack of

consistent data material. The figures covering 1995-99 include aid to railways, while the figures from 2002 do not. The difference is very significant since state aid to railways constituted the bulk of the aid to the transport sector in 1995-99. According to the Commission, there is a lot of controversy in the EU regarding what constitutes state aid in the case of support to railways and therefore the figures are inconclusive. The total volume of state aid in the EU 15 have fallen over the last years and despite the increase in the share of aid to the manufacturing sector, the volume of aid to that particular sector fell by €2,5 billion between 1998 and 2002 (European Commission, 2004e, pp. 13-17).

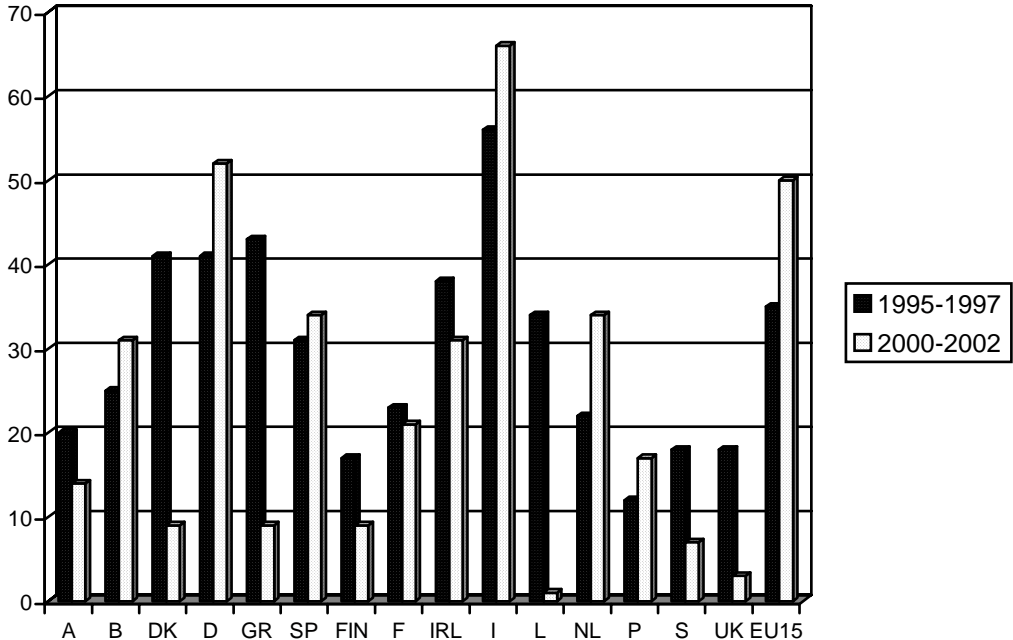
There are great disparities in sectoral distribution between the member countries in the EU as is shown in tables 3 and 4 in annex 2. Notably the disparities were larger during 1995 to 1999 than in 2002. The state aid were more evenly distributed among the sectors in the different countries in the earlier time period, but in 2002 the figures show a much more concentrated pattern. The transport sector, which was the dominating receiver of state aid in the 1990s, hardly got any funding at all in 2002 in any country, but since state aid to railways is excluded it is difficult to make any strong conclusions from the data material at hand. Some general trends can be shown between 1995 and 2002 though. The countries that give the largest proportions of state aid to the agriculture and fisheries sectors are Austria and Finland, while Italy and Denmark are in the lead in the manufacturing sector. The transport sector is dominated by the Benelux-countries and Sweden and the coal sector, where many countries are not participating, by Spain and Germany. The service sector does only have one major participant during the entire period and that is Portugal. According to the most recent figures from 2002, manufacturing is getting the largest support in nine of the member countries, agriculture and fishing in six and services in only one country.

5. State aid to the manufacturing sector - objectives and aid instruments

5.1 Distribution of state aid to the manufacturing sector

This section will focus on aid to the manufacturing sector – a sector that is more likely to have a larger impact on trade effects and domestic and foreign competition than for example the service sector. As could be seen in the last chapter, state aid to the manufacturing sector constitutes a large part of total state aid in the EU. According to the data at hand it looks like the largest part, but since there are problems with the data concerning aid to the transport sector, that conclusion cannot be drawn. This section will take a look at the development of aid levels in the manufacturing sector in the different member states. In order to get an overview of the changes over time, a comparison of figures from 1995-2002 has been made. Figure 3 presents the results for each member country in the EU 15, taken from table 5 in annex 2. The figures from 1990-1992 are inconclusive due to many countries providing incomplete or no data and therefore the comparisons are made using figures from 1995-2002.

Figure 3: Share of aid to manufacturing by country in relation to total state aid (%)



Source: Figures for 1990-1992: European Commission, 1997. Figures for 1995-1999: European Commission, 2001a. Figures for 1998-2002: European Commission, 2004b. (See table 5 in annex 2).

State aid to the manufacturing sector accounts for a large proportion of total state aid and has been increasing over the years. The state aid levels to this sector are affecting trade not only in the country granting the aid, but also in partner-countries and countries outside the EU. The share of total state aid to the manufacturing sector for the entire EU 15 increased by 15%, from 35% to 50%, between 1995 and 2002. The two countries with the largest average shares of state aid to the manufacturing sector in the EU during the period were Italy (57%) and Germany (46%). The largest elevations of aid levels between 1995 and 2002 could be seen in Germany, Italy and the Netherlands. On the other hand aid levels were diminishing in countries such as Luxembourg, Denmark, Greece and the UK. There was a growing divergence of aid levels to the manufacturing sector between the member countries from 1995 to 2002. In 1995-97 the manufacturing sector in Italy and Greece received the highest levels and in Portugal and Finland the lowest, with a difference between the extremes of 44%. In 2000-02 the difference had increased to 65% with the manufacturing sector in Italy and Germany receiving the highest aid levels and in Luxembourg and the UK the lowest.

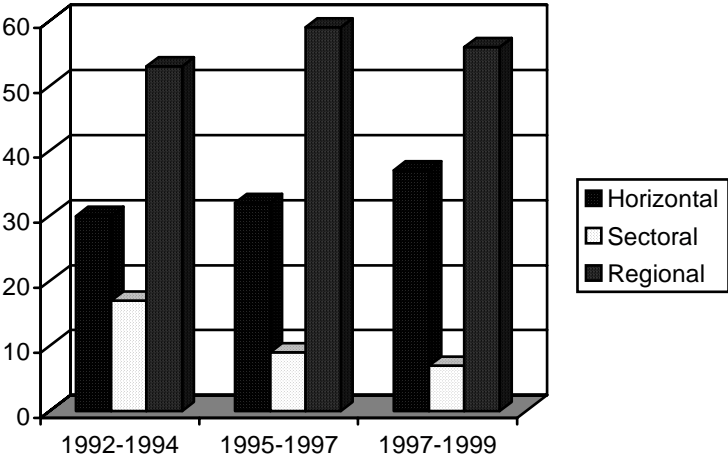
5.2 State aid to the manufacturing sector – breakdown by objective

The next questions in need of answers concern the objectives of state aid to the manufacturing sector. Has the EU reached the goal of redirecting a larger share of aid towards horizontal objectives and is there a difference between the member states? Aid to the manufacturing sector in the EU can be divided into different objectives as described in section 2.2. The main categories are horizontal, sectoral and regional objectives, which in turn can be divided into subcategories. This type of classification can also be used to describe state aid in other sectors, but here the focus lies on aid to the manufacturing sector in the EU 15. Sectoral aid is considered to be the most distortive to competition and horizontal the least so. In order to redirect state aid towards horizontal objectives the EU have increased the amount of reforms and actions to ensure a competitive environment within the union.

Figure 4 shows the distribution of state aid to manufacturing in the EU by objectives. The data for 1992-94 concern EU 12 instead of EU 15 and the lack of figures covering 2000 and later is due to difficulties in obtaining corresponding numbers. Aid to regional objectives dominated between 1992 and 1999, but showed a slight decline in the last period. Aid to horizontal objectives showed a steady increase over the years and in the end of the 1990s the

gap between the two diminished. Aid to sectoral objectives accounted for the smallest share of state aid to the manufacturing sector and showed a decline between 1992 and 1999. The increasing focus on aid to horizontal objectives at the expense of aid to primarily sectoral objectives shows the progress made in redirecting state aid in the EU towards objectives considered less distortive to competition during the period examined.

Figure 4: State aid to the manufacturing sector according to objective (%)



Source: Figures for 1992-94 from European Commission, 1997. Figures for 1995-97 and 1997-99 from European Commission, 2001a. (See tables 6, 7 and 8 in annex 2).

Looking at the different member countries there have also been some changes over the time period. Tables 6, 7 and 8 in annex 2 show the figures concerning each country and the objectives of state aid to the manufacturing sector. Even though the greater part of aid is directed towards regional objectives, there were more countries granting aid to horizontal objectives in 1997-99 than in 1992-94 or in 1995-97. In the earlier periods the distribution was even between the number of countries giving the greater part of their aid to horizontal or to regional objectives. In 1997-99 nine out of fifteen countries endorsed horizontal objectives and five endorsed regional objectives to a larger extent.

Spain was the only country granting the major part of its manufacturing aid to sectoral objectives during the entire time period. There were quite a few countries hardly supporting those objectives at all, such as Sweden, Luxembourg, the UK and Belgium. Denmark and Greece are two extremes where Denmark gave 92% of aid to the manufacturing sector to horizontal objectives in 1997-99. Greece on the other hand, has changed focus from giving aid to all objectives in 1992-94, into giving 93% of its aid to regional objectives in 1997-99.

5.2.1 Aid to horizontal objectives

State aid to horizontal objectives is, as explained before, aid that is not granted to specific sectors, regions or projects and can be targeted directly on market failures or on a specific area, such as for example energy saving, environment or research and development. It is also considered less distortive than aid to other objectives. The EU average of total aid to horizontal objectives, (i.e. not just aid to the manufacturing sector), has risen steadily except for a brief period during the early 1990s when it decreased on behalf of aid to sectoral and regional objectives, especially rescue and restructuring operations. An increase in aid to the rescue of companies or branches of industries was not considered positive though, since that kind of government intervention is very distortive to competition (European Commission, 1997, p. 27). Since then the trend is the opposite. One of the official EU goals is to increase the proportion of state aid to horizontal objectives at the expense of aid to specific sectors or regions. Between 1992 and 2002 the EU average of total state aid to horizontal objectives as a percentage of total aid, increased 15% and reached 73% in 2002. There were increases in just over half of the member countries over the period both in absolute numbers and in relation to total state aid. The increase in aid to horizontal objectives in the later part of the period, between 1998 and 2002, was mainly due to increases in aid to environmental objectives and to research and development (European Commission, 2004d).

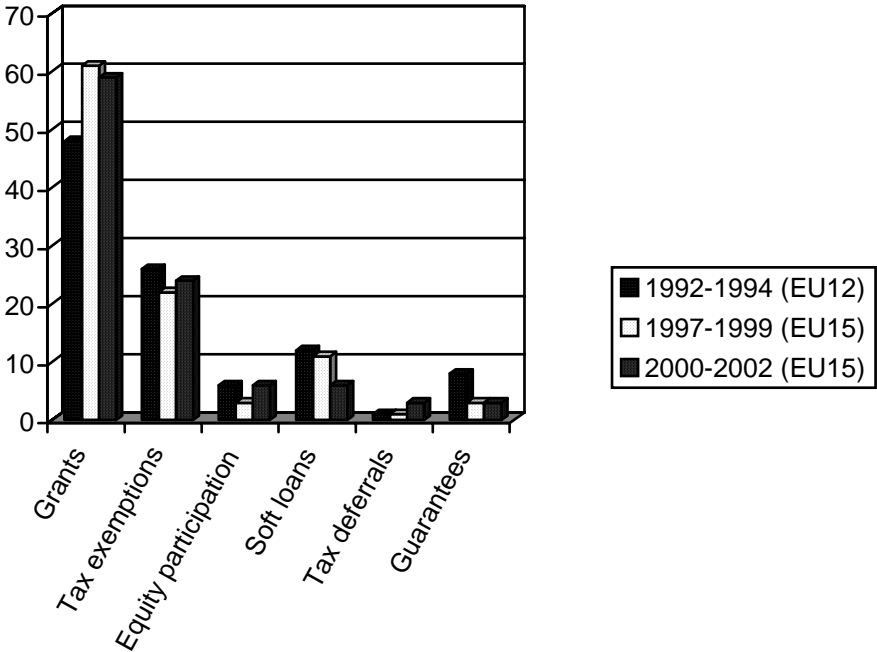
Unfortunately there is no data available to examine if the overall increases in total state aid to horizontal objectives have coincided with a similar increase of aid to horizontal objectives within the manufacturing sector. There are no figures showing the development after 1999 and therefore it is difficult to make any strong conclusions. It is however likely that an overall increase in state aid to horizontal objectives would also affect the manufacturing sector in a similar way. Especially since the share of total aid to the manufacturing sector has increased during the same period.

5.3 Forms of aid to the manufacturing sector

It is also of interest to take a look at the different forms of aid available to use in the manufacturing sector and the distribution of aid instruments between the member states. Different types of aid instruments will have different implications on economic integration

and are used to support different kinds of objectives. It is important to seek out the aid instrument best suited for each situation and to make sure that the use of it distorts competition as little as possible. According to the Commission, the aid instruments used to supply state aid to manufacturing and services can be classified into the categories budgetary expenditure and tax expenditure. The former is aid provided through the central government budget (grants, equity participation, soft loans and guarantees) and the latter is aid granted via the tax or social security system (tax exemptions and tax deferrals) (European Commission, 2001a, pp. 94-95). Budgetary aid is generally the preferred way of financing state aid to manufacturing in the EU and quite a few countries use it without exception. Others rely mainly on budgetary aid, but also make use of tax expenditure and especially tax exemptions, for the financing of state aid (European Commission, 1997, p. 13).

Figure 5: Forms of aid to the manufacturing sector (%)



Source: Figures for 1992-1999: European Commission 1997. Figures for 1997-1999: European Commission, 2001a. Figures for 2000-2002: European Commission, 2004c. (See table 9 in annex 2).

Table 9 in annex 2 presents the aid instruments used by the member states in the manufacturing sector. Note that the figures from 2000-2002 include aid to the service sector, while the earlier figures only include aid to the manufacturing sector. According to the Commission, aid to services was not however a large part of total state aids in the member states during 1995-1999 with the exception of Portugal (European Commission, 2001a, p. 26).

A comparison between the earlier and the later figures is therefore possible, even though the differences in the data material must be considered.

The general trend of the use of different aid instruments in the manufacturing sector between 1992 and 2002 in the EU is presented in figure 5. The levels have been relatively steady over the years and the largest difference can be seen in the use of grants, soft loans and guarantees, where the use of the former increased at the expense of the two latter.

The most frequently used aid instruments were by far grants, followed by tax exemptions. The former is more popular since it is more flexible and easier to direct towards a specific area or objective than the latter. It is easier to use grants and other budgetary aids, than go through the parliament in order to change the tax laws whenever government intervention is needed. All member countries used grants and almost all used tax exemptions to some extent. Financial transfer by public authorities in the form of equity participation was not a widely used aid instrument among the member countries. Soft loans (i.e. loans at reduced interest rates) were the most common form of state aid after grants and tax exemptions, but would still not be widely used among the member countries since they imply a heavier burden on the budget than many other instruments. It is less costly to grant interest subsidies to reduce the cost of loans. Tax deferrals (i.e. accelerated depreciation and the constitution of tax free reserves) were one of the least used aid instruments in the EU and most member countries did not use this form of aid at all. The use of guarantees declined over the period and was in 2002, together with tax deferrals, the least used aid instrument in the EU. This type of aid is mainly used in rescue and restructuring operations and to help small and medium-sized enterprises and is, together with equity participation, the least transparent form of state aid (European Commission, 1997, pp. 11-12).

5.3.1 Country differences

Table 9 in annex 2 presents the figures for the use of different aid instruments in the member countries between 1992 and 2002. During this period grants have been the most used aid instrument and have accounted for 50-60% of all state aid to manufacturing. Countries like Belgium, Denmark, Spain, Luxembourg, Austria and Sweden used grants to finance over 80% of their state aid to manufacturing and services in the early 2000s, but only Denmark, Spain and Luxembourg were at a similar level during the 1990s. France, Italy and Belgium, Portugal

and Ireland were the only countries using tax exemptions more frequently than grants in the 1990s, but in the early 2000s the two latter countries were the only ones remaining. Only seven countries have used tax deferrals during the period and the only countries significantly above the EU average of 1-3% over the period, were Italy and the Netherlands. The EU average of soft loans has decreased over the period. It was used by Austria, Germany, Greece, Spain and Sweden to a larger extent in the beginning of the period, but only Austria kept the level above the EU average in the early 2000s and was joined by the UK. Equity participations have been used by nine countries over the period and only in any significant amount by France and to some extent by Ireland. Italy used it in the early 1990s, but had almost ceased using it later in the period. Guarantees were used by most member states as an aid instrument, but the levels declined over the period. Only Germany was above the EU average in the later figures.

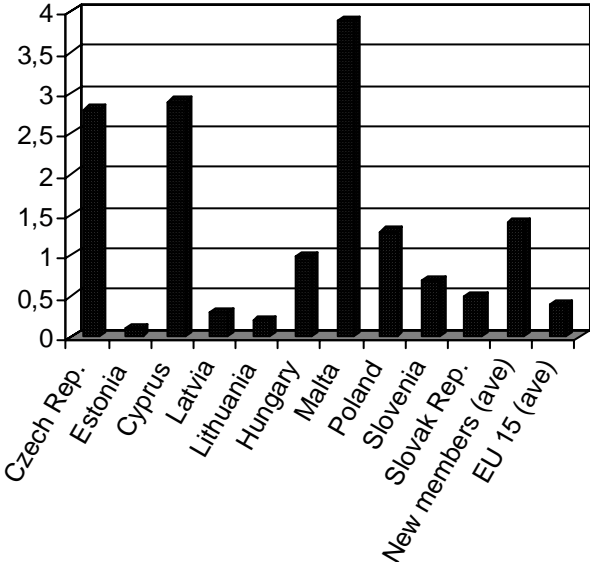
5.4 New member states

After the enlargement of the EU in 2004, when ten new members entered the EU, it is faced with new challenges including coordinating the work to reduce and redirect state aid in the extended union. What are the current disparities in total state aid in relation to GDP between the new members and the EU 15 and how large is the share of total aid to horizontal objectives in the new member states? There are not yet data available to study state aid to the manufacturing sector in the new member states and therefore only total state aid have been investigated.

One challenge for the EU will be attending to the extensive public sectors and the stronger tendency towards granting state aid in the former communist countries. The data used is presented in table 10 in annex 2 and covers 2000-2003 for the new member states and the average aid levels in the EU 15. Unfortunately there are not any data available yet covering the entire EU 25 for the time period in question. On average the figures show higher levels of state aid in relation to GDP in almost all the new member countries compared to the EU 15 average. According to the Commission, the absolute overall aid levels in the new member states increased from €4 billion in 2000 to just under €8 billion in 2003. The reason was, among other things, the difficult transition from centrally planned to market economies and specific problems in certain sectors (European Commission, 2004g).

Total state aid levels as a percentage of GDP are presented in figure 6. The aid levels were significantly higher in the new member countries with an average of 1,4% compared to the EU 15 average of 0,4 % during the same period. There are large disparities between the new members as can be seen in table 10 in annex 2, with Malta (3,9%), Cyprus (2,9%) and Czech Republic (2,8%) at the highest levels and the Baltic states, all between 0,1-0,3%, at the lowest. Quite surprisingly the two not former communist countries Malta and Cyprus have some of the highest levels of state aid in relation to GDP, while the three Baltic states show lower levels than most members of the EU 15.

Figure 6: Total state aid in relation to GDP 2000-2003 – a comparison (%)



Source: Data from European Commission, 2004h. (See table 10 in annex 2).

As in the EU 15 the goal in the new member states is now also to reduce overall aid levels and to redirect as much of the state aid as possible towards horizontal objectives. In 2002 the EU 15 average of total state aid to horizontal objectives were 73%, while the average for the new members were around 22%. The disparities between the new members are large, ranging from around 5% for countries like Malta and Lithuania to 100% in Estonia. There are however trends, showing an increase in aid towards the wanted objectives.

6. Summary and conclusions

The purpose of this study was to examine if the development of total state aid in the EU and the distribution of aid between the member states have changed over the last ten years. It was also to take a closer look at aid to the manufacturing sector to determine if the objectives and forms of aid have changed during the same period and to examine the effects this kind of government intervention have on trade and competition.

The overall levels of state aid in relation to GDP have been diminishing over time both at the average EU-level and at a country-level and both in a shorter and in a longer perspective. There are concerns regarding the difference in aid levels from different data sources, but a general downward trend can nevertheless be seen. The total aid levels have also been converging between the member states, which has resulted in a more even distribution of state aid in the union.

The sectoral distribution of total state aid shows that aid to the manufacturing sector receives a large share of total state aid in the EU and so are the agricultural and fisheries sectors. Again lack of consistent data material for the time period examined have caused problems and aid to the transport sector is likely to account for a large proportion of total state aid as well, even though the latest figures does not show it. There have been larger disparities in sectoral distribution earlier in the period between the member states, but in 2002 the figures showed a more concentrated pattern. One of the goals set by the member states is to redirect state aid towards horizontal objectives at the expense of aid to sectoral and regional objectives. Horizontal aid is considered less distortive to competition and the share of aid to horizontal objectives concerning both total state aid and aid to the manufacturing sector have increased during the 1990s and the trend is continuing.

There have not been very big changes in the use of aid instruments to the manufacturing sector at an average level in the EU between 1992 and 2002. The most significant is the increased use of grants and the diminished use of soft loans and guarantees. The overwhelming majority of the countries prefer to use grants as the main aid instrument to distribute aid to the manufacturing sector. It is the most flexible form of state aid and is easier to direct towards a specific area or objective than other aid instruments.

The enlargement of the EU signifies an increase in overall state aid levels for the entire union. The new member states bring higher aid levels in relation to GDP to the union and this will be noticeable in the average levels of the EU 25. The Baltic States are however an exception, with levels even below the EU 15 average. High aid levels in some of the other countries can be explained by difficulties in transforming their economies from centrally planned to market oriented, but the surprisingly high levels in Malta and Cyprus cannot be explained by that factor. The new members are now taking part in the work to reduce total aid levels and to redirect state aid towards horizontal objectives.

The state aid levels have implications on trade effects in the EU in different ways and affects trade both inside and outside the union. Trade creation affects member states when their domestic production cannot compete with subsidized production from another member country. Trade diversion affects countries outside the EU when member states substitute externally imported products with subsidized products from other members. Both trade patterns and competition are affected. State aid to the manufacturing sector could affect trade to a larger extent than aid to other sectors and the average aid levels to manufacturing in the EU have increased between 1995 and 2002. This implies larger effects on trade and competition, but examining the country specific data shows however, that only five out of fifteen member states are responsible for the increasing levels, while the remaining ten countries actually are showing decreasing levels. This, together with the overall decrease in total state aid in relation to GDP in the EU, could have less distorting effects on trade and integration.

State aid levels also affect competition in the EU and the redirection of aid towards horizontal objectives is considered to lead to less market distortions. When state aid is not granted to specific industrial sectors, companies or projects, competition is not distorted in the same way. State aid to support for example research and development and environmental issues are beneficial for the entire EU as long as the aid is not reaching individual industries on its way to the original destination. It is a problem making sure that the aid reaches the intended goal and is used to cover the costs of the market failure it is supposed to rectify and not just cover normal firm-specific operations.

There are many challenges for the EU when it comes to tackling the implications of state aid. One is to include the new member states in the process of reducing aid levels in areas that are

distortive to competition and making sure that structural reform takes place in areas where it is needed. There is a danger in governments trying to save domestic, failing firms and industries and by that affecting the market structure, instead of letting the necessary restructuring take place. This also affects the market integration since the natural process implies letting the market decide which industries go out of business. If the supported industries lose government support, they either survive by rationalizing or close down, in both cases often leaving workers unemployed and adding an economic burden on society. Consequences for the state are loss of tax incomes and domestic production. Granting state aid could be an easier way than to force structural reforms and by that avoid both political and economical difficulties.

There are many areas to examine further concerning state aid in the EU. To investigate the influence of the new member states on aid levels and focus of state aid in the EU, or to investigate how horizontal aids affect competition in the EU will make interesting studies. A study with focus on state aid in specific sectors would also be interesting in order to better understand the impact of state aid on trade and competition.

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Annex 1

Articles 87-89 of the EC Treaty from the European Commission:

Article 87 of the EC Treaty (ex Article 92)

1. Save as otherwise provided in this Treaty, any aid granted by a Member State of through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, insofar as it affects trade between Member States, be incompatible with the common market.

2. The following shall be compatible with the common market:

a) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned;

b) aid to make good the damage caused by natural disasters or exceptional occurrences;

c) aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, insofar as such aid is required in order to compensate for the economic disadvantages caused by that division.

3. The following may be considered to be compatible with the common market:

a) aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment;

b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;

c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;

d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Community to an extent that is contrary to the common interest;

e) such other categories of aid as may be specified by decision of the Council acting by a qualified majority on proposal from the Commission.

Article 88 of the EC Treaty (ex Article 93)

1. The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development of by the functioning of the common market.

2. If, after giving notice to the parties concerned to submit their comments, the Commission finds that aid granted by a State of through State resources is not compatible with the common market having regard to Article 87, or that such aid is being misused, it shall decide that the State concerned shall abolish or alter such aid within a period of time to be determined by the Commission.

If the State concerned does not comply with this decision within the prescribed time, the Commission or any other interested State may, in derogation from the provisions of Articles 226 and 227, refer the matter to the Court of Justice direct.

On application by a Member State, the Council may, acting unanimously, decide that aid which that State is granting or intends to grant shall be considered to be compatible with the common market, in derogation from the provisions of Article 87 or from the regulations provided for in Article 89, if such a decision is justified by exceptional circumstances. If, as regards the aid in question, the Commission has already initiated the procedure provided for in the first subparagraph of this paragraph, the fact that the State concerned has made its application to the Council shall have the effect of suspending that procedure until the Council has made its attitude known.

If, however, the Council has not made its attitude known within three months of the said application being made, the Commission shall give its decision on the case.

3. The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the common market having regard to Article 87, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision.

Article 89 of the EC Treaty (ex Article 94)

The Council, acting by a qualified majority on a proposal from the Commission and after consulting the European Parliament, may make any appropriate regulations for the application of Articles 87 and 88 and may in particular determine the conditions in which Article 88(3) shall apply and the categories of aid exempted from this procedure.

(European Commission b).

Annex 2

Table 2: Total state aid in relation to GDP 1981-2002 (%)

	1981-86	1986-88	1988-90	1990-92	1993-96	1996-99	1999-02	Average 81-02
Austria	-	-	-	-	-	0,9	0,7	0,8
Belgium	4,1	3,2	2,8	2,3	0,7	0,5	0,5	2,0
Denmark	1,3	1,0	1,1	1,0	0,7	0,9	1,0	1,0
Finland	-	-	-	-	-	1,7	1,3	1,5
France	2,7	2,0	2,1	1,8	1,0	1,0	0,7	1,6
Germany	2,5	2,5	2,5	2,4	2,1	1,0	0,7	2,0
Greece	2,5	4,5	3,1	2,2	1,4	1,0	0,6	2,1
Ireland	5,3	2,7	1,9	1,5	0,7	0,9	1,1	2,0
Italy	5,7	3,1	2,8	2,8	1,3	0,9	0,5	2,5
Luxembourg	6,0	4,0	3,9	3,9	0,6	0,5	0,4	2,8
Netherlands	1,5	1,3	1,1	0,9	0,4	0,6	0,5	0,9
Portugal	-	1,5	2,0	1,4	1,2	1,5	1,2	1,5
Spain	-	2,7	1,8	1,3	0,9	0,8	0,7	1,4
Sweden	-	-	-	-	-	0,4	0,4	0,4
UK	1,8	1,1	1,2	0,6	0,3	0,3	0,2	0,8
EU 15	3,0	2,2	2,1	1,9	1,1	0,8	0,6	1,7

Source: Figures for 1981-1992: European Commission, quoted from Curzon Price, 2001. Calculations for 1993-2002 are made from data from the European Commission, 2004a.

Table 3: Sectoral distribution of total state aid 1995-99 (%)

	Agriculture & Fisheries		Manufacturing		Coal		Transport		Services		Employment & Training	
	95-97	97-99	95-97	97-99	95-97	97-99	95-97	97-99	95-97	97-99	95-97	97-99
Austria	51	46	20	22	0	0	27	30	1	2	1	1
Belgium	8	8	25	21	0	0	64	67	0	0	3	4
Denmark	17	15	41	49	0	0	32	31	2	2	9	14
Germany	7	6	41	37	16	18	35	37	1	1	0	1
Greece	11	14	43	41	0	0	47	45	0	0	0	0
Spain	18	20	31	25	16	18	26	24	1	1	8	12
Finland	78	74	17	21	0	0	2	2	0	1	3	2
France	20	17	23	26	4	5	37	34	16	17	0	0
Ireland	16	17	38	45	0	0	24	13	11	15	11	10
Italy	9	13	56	42	0	0	31	39	4	5	0	2
Luxembourg	23	14	34	21	0	0	43	64	0	1	0	0
Netherlands	34	37	22	18	0	0	44	44	1	1	0	0
Portugal	13	20	12	12	0	0	19	7	45	53	10	7
Sweden	14	19	18	23	0	0	54	51	4	5	10	2
UK	19	18	18	19	13	8	35	35	3	3	11	17
EU 15	15	16	35	31	8	8	35	36	5	6	2	3

Source: European Commission, 2001a.

Table 4: Sectoral distribution of total state aid 2002 (%)

	<i>Manufacturing</i>	<i>Services*</i>	<i>Agriculture & Fisheries</i>	<i>Coal</i>	<i>Transport*</i>	<i>Other non-manufacturing</i>
Austria	30	5	66	-	-	0
Belgium	67	3	29	-	0	-
Denmark	76	2	15	-	6	-
Germany	57	3	14	26	0	0
Greece	59	1	40	-	-	-
Spain	56	2	18	23	1	0
Finland	12	1	84	-	2	-
France	37	17	35	10	1	0
Ireland	40	12	47	-	0	-
Italy	73	3	19	-	5	0
Luxembourg	57	5	38	-	-	-
Netherlands	39	3	50	-	9	-
Portugal	26	40	33	-	0	-
Sweden	30	11	40	-	18	1
UK	48	0	28	1	4	20
EU 15	51	6	28	11	2	2

Source: DG Competition, quoted from European Commission, 2004e.

*Aid to services include tourism, financial, media and culture and aid to transport excludes railways. (Due to the rounding of figures, the percentages of some member states do not sum up to exactly 100%. There is no explanation for the mix of 0 and – in the table).

Table 5: State aid to manufacturing in relation to total state aid 1990-2002 (%)

	<i>1990 -1992</i>	<i>1995 - 1997</i>	<i>1997-1999</i>	<i>1998-2000</i>	<i>2000 -2002</i>	<i>Average 95-02</i>
Austria	-	20	22	13	14	17
Belgium	45	25	21	33	31	28
Denmark	31	41	39	8	9	24
Germany	38	41	37	54	52	46
Greece	-	43	41	10	9	26
Spain	-	31	25	36	34	32
Finland	-	17	21	11	9	15
France	-	23	26	23	21	23
Ireland	-	38	45	39	31	38
Italy	-	56	42	65	66	57
Luxembourg	-	34	21	1	1	14
Netherlands	-	22	18	30	34	26
Portugal	-	12	12	16	17	14
Sweden	-	18	23	9	7	14
UK	58	18	19	3	3	11
EU 15	-	35	31	50	50	42

Source: Figures for 1990-1992: European Commission, 1997. Figures for 1995-1999: European Commission, 2001a. Figures for 1998-2002: European Commission, 2004b.

Table 6: State aid to manufacturing according to objective 1992-94 (%)

	<i>Horizontal</i>	<i>Sectoral</i>	<i>Regional</i>
Belgium	82	3	15
Denmark	72	25	3
Germany	15	5	80
Greece	60	19	21
Spain	40	43	16
France	44	38	18
Ireland	15	11	73
Italy	27	22	50
Luxembourg	30	0	70
Netherlands	74	11	15
Portugal	29	45	26
UK	35	17	48
EU 12	30	17	53

Source: European Commission, 1997.

Table 7: State aid to manufacturing according to objective 1995-97 (%)

	<i>Horizontal</i>	<i>Sectoral</i>	<i>Regional</i>
Austria	70	3	27
Belgium	47	23	29
Denmark	85	13	2
Germany	24	6	71
Greece	0	1	99
Spain	26	60	14
Finland	71	9	20
France	59	6	35
Ireland	19	9	71
Italy	23	5	72
Luxembourg	29	2	69
Netherlands	76	9	16
Portugal	62	23	15
Sweden	45	0	55
UK	39	1	60
EU 15	32	9	59

Source: European Commission, 2001a.

Table 8: State aid to manufacturing according to objective 1997-99 (%)

	<i>Horizontal</i>	<i>Sectoral</i>	<i>Regional</i>
Austria	62	3	35
Belgium	66	0	34
Denmark	92	6	2
Germany	29	5	67
Greece	4	3	93
Spain	38	40	22
Finland	74	10	16
France	48	10	42
Ireland	65	1	34
Italy	22	5	73
Luxembourg	37	0	63
Netherlands	83	3	14
Portugal	65	18	17
Sweden	59	0	41
UK	39	1	61
EU 15	37	7	56

Source: European Commission, 2001a.

Table 9: Forms of state aid to the manufacturing sector 1992-2002 (%)

		<i>Grants</i>	<i>Tax exemptions</i>	<i>Equity participation</i>	<i>Soft loans</i>	<i>Tax deferrals</i>	<i>Guarantees</i>
Austria	92-94	-	-	-	-	-	-
	97-99	77	0	0	18	0	5
	00-02	86	0	0	10	0	4
Belgium	92-94	37	45	1	9	0	8
	97-99	72	17	5	4	1	1
	00-02	82	10	0	7	0	2
Denmark	92-94	94	2	0	3	0	1
	97-99	56	35	0	7	0	2
	00-02	95	5	0	0	0	0
Germany	92-94	41	25	0	21	1	11
	97-99	60	11	0	21	1	5
	00-02	50	38	0	4	0	8
Greece	92-94	54	20	0	13	0	13
	97-99	97	1	0	2	0	0
	00-02	74	25	0	1	0	0
Spain	92-94	86	0	0	12	0	2
	97-99	91	0	2	7	0	0
	00-02	90	0	0	8	0	2
Finland	92-94	-	-	-	-	-	-
	97-99	88	2	1	8	0	0
	00-02	73	19	0	7	0	0
France	92-94	46	19	12	5	2	15
	97-99	30	47	13	8	0	2
	00-02	36	25	28	9	0	3
Ireland	92-94	79	6	8	3	0	3
	97-99	30	58	8	0	0	5
	00-02	29	67	3	0	0	1
Italy	92-94	42	38	14	5	0	0
	97-99	64	33	1	3	0	0
	00-02	70	12	1	3	14	0
Luxembourg	92-94	93	0	0	7	0	0
	97-99	94	4	0	2	0	0
	00-02	95	0	0	5	0	0
Netherlands	92-94	78	13	0	2	0	7
	97-99	64	20	0	5	8	2
	00-02	68	13	0	5	10	3
Portugal	92-94	72	21	0	1	0	5
	97-99	85	4	2	9	0	0
	00-02	20	74	0	5	1	0
Sweden	92-94	-	-	-	-	-	-
	97-99	70	16	2	12	0	0
	00-02	83	8	1	8	0	0
UK	92-94	87	6	0	2	1	4
	97-99	97	1	0	1	1	0
	00-02	73	9	1	18	0	0
EU 12	92-94	48	26	6	12	1	8
EU 15	97-99	61	22	3	11	1	3
	00-02	59	24	6	6	3	3

Source: Figures for 1992-199: European Commission 1997. Figures for 1997-1999: European Commission, 2001a. Figures for 2000-2002: European Commission, 2004c. (Due to the rounding of figures, the percentages of some member states do not sum up to exactly 100%).

Table 10: Total state aid in relation to GDP in the new member states 2000-03 (%)

	<i>Total state aid as % of GDP</i>	<i>Aid to horizontal objectives as (%) of total state aid</i>
Czech Republic	2,8	10
Estonia	0,1	100
Cyprus	2,9	23
Latvia	0,3	55
Lithuania	0,2	4
Hungary	1,0	42
Malta	3,9	5
Poland	1,3	24
Slovenia	0,7	73
The Slovak Republic	0,5	24
New members	1,4	22
EU 15	0,4	73

Source: Figures from European Commission, 2004h. The figures for Malta covers only 2000-2002. State aid data for EU 15 refers to 2002.