

German Foreign Economic Policy in the Age of Globalisation

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I The Scope, Levels and Constraints of Foreign Economic Policy in Germany

Enhancing the competitiveness of German firms on foreign markets and preserving the attractiveness of Germany as a business location to foreign investors are the twin objectives of foreign economic policy (FEP) in Germany. Its scope extends far beyond conventional “border“ measures to encompass a broad range of “domestic“ policies, such as competition policy, technology policy, and the policies of regulation and subsidisation, as these policies are increasingly relevant in terms of international competition. German FEP is implemented at the national, supra-national (i.e. European) and international (i.e. WTO, OECD, G7, etc.) level under a number of constraints.¹ Internationalisation of domestic economic policies also calls for FEP to be analysed in terms of international systems or institutional competition. The rivalry that occurs is between the immobile factors of production in different countries (including the legal, economic, social and political system), which vie for the only really mobile factor of production, namely capital (including technical knowledge).

In *theory*, FEP in Germany is the “external“ complement of market-oriented structural policy in the “internal“ economy. The latter consists of:

- Policy on the underlying order (“Ordnungspolitik”), setting out the legal framework and underlying economic institutions;
- Competition policy, safeguarding individual economic freedom;
- Market policy, ensuring that markets function properly.

Structural policy concurs with growth and stabilisation policies that must not interfere with private decisions on what to produce and how to produce it. The basic tenet of German FEP accordingly is non-discrimination between foreign and domestic market participants. In *practice*, however, deviations from this “baseline“ - and from the model of market-oriented structural policy in general - have been frequent in Germany.

At the *national* level, an important part in German policy is played by the “median voter”, upon whose vote any Party wishing to form the next government depends, and who is generally regarded as oriented towards stability and security, but with a dislike of structural adjustment and mobility (Peters 1996, p. 95). The federal structure of Germany also entails a prominent role of the individual states (*Länder*) in foreign economic policy which often leads to measures that are inconsistent with the framework outlined above.² Finally, and most important, pressure is exerted by industry associations and a

wide variety of lobbyists. Granting specific concessions to such groups is rational for political decision-makers if the costs of the measures taken can be shared out among larger groups which are less well informed and less well organised.³

However, institutional structures may *limit* the impact of special interests. A useful analytical tool in this context is the notion of “encompassingness“ as proposed by Olson.⁴ In the field of trade policy, political-economic analysis of FEP in Germany has indeed shown a high degree of “encompassingness“ of the organisations acting on the demand and supply side of protection. From this, one would expect a rather liberal policy stance to prevail.

Industrial business in Germany is organised in the Federation of German Industry (*Bundesverband der Deutschen Industrie/BDI*) which comprises branches as diverse as precision engineering, chemicals and clothing. It represents industry as a whole vis-à-vis the government on all issues of interest to it, including foreign economic policy. Even though each individual industry promotes the policy it favours in this area, there is a fairly large degree of coordination at the top of the *BDI* through its Foreign Trade Committee (*Außenwirtschaftsausschuß*). The *BDI* position on trade policy is thus as one might presume: “Free trade is a good thing“ (Weiss et al. 1988, p. 49).⁵ German *labour unions* by and large share this broad view of trade policy which is based on the recognition that industrial jobs in Germany to a high degree depend on exports. This attitude characterises powerful individual unions like the metal workers union (*IG Metall*) as well as the (less powerful) umbrella organisation (*Deutscher Gewerkschaftsbund/DGB*).

Views - and underlying structures - on the demand side of protection largely match with features on the supply side where the Ministry of Economics takes the lead. Its industry department, with individual industry desks that are often sympathetic to specific protectionist demands, faces with other departments, in particular the departments on Foreign Economic Policy (*Außenwirtschaftspolitik*) and on Economic Policy (*Wirtschaftspolitik*), and with the top of the Ministry, which are committed to liberal trade⁶.

The *European* “factor” in German FEP varies with the policy area at hand. The leeway available to Germany in pursuing its own *research and technology policy* has not yet been substantially restricted by the increasing significance of Community programmes in this field, as these are still relatively minor in quantitative terms. With regard to *subsidies*, over and above R&D support, Germany has traditionally been a strong advocate of strict control at the Community level. This policy stance, and Germany’s modest subsidi-

sation of manufacturing industries, no longer holds, though, as re-building industry in eastern Germany still involves public financial assistance on a large scale.⁷ In *trade policy*, as far as trade in goods is concerned, more powers have been ceded to Community bodies by member states than in any other area of foreign economic policy. Germany can now also wield less influence on anti-dumping (and anti-subsidy) measures in the Council of Ministers, which are the instruments of first choice in European trade protection, after the voting rule in this area of trade policy was changed from a qualified to a simple majority in 1994. The substantial transfer of powers from national authorities to the European Commission in *competition policy* has led to the increased importance of industrial policy considerations in this field. This happened, against German opposition, at the insistence of France.⁸ Franco-German antagonism is also evident in *industrial policy* in general, witness the debate on Title XIII (Industry) of the EC Treaty which was to introduce specific Community powers in this area, reaching beyond the field of research and technology.⁹

On the whole, Germany advocates foreign economic policies in the European Union that limit state interference with market forces. Together with the United Kingdom, the Netherlands and Denmark, and recently Finland and Sweden, Germany is frequently depicted as a “standing“ member of the liberal “camp“ within the EU which is set against a *dirigiste* group of countries led by France, with Italy and Greece as regular “allies“. To what extent the German government actually asserts its ideas on FEP in the EU bodies is difficult to tell, however, as in many cases “package deals“ are cut which tend to undermine the practical value of the “right of veto“ where it applies in principle. EU membership may also be used as an excuse to defend protectionist policies at home.

At the *international* level, Germany acts both autonomously and as a member of the European Union. The Community’s exclusive competence in trade policy is confined to trade in goods where decisions are taken by qualified majority (Article 113 of the EC Treaty). In other areas of trade policy, such as trade in services or in the field of trade-related intellectual property, joint international action by the Community requires unanimity in the Council of Ministers, and the agreements concluded need ratification by the individual member states.¹⁰ This is seen by the European Commission as a serious disadvantage in international negotiations because of the delays involved and the need to adopt a bargaining position corresponding to the lowest common denominator. The Commission therefore pressed for amending Article 113 to extend beyond trade policy in goods. However, this met with the resistance of Germany, as well as of Britain and France, which are sceptical about handing more power in this area to Brussels.¹¹

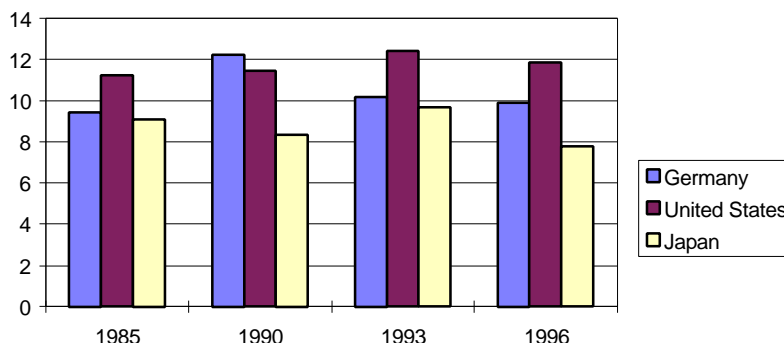
II Germany's Position in International Trade and Investment

Since the end of the (short-lived) post-unification boom in 1992, there have been more frequent and vocal complaints in Germany about a lack of international competitiveness on the part of German industry and a declining ability of the country to attract internationally mobile factors of production such as capital, technical knowledge and entrepreneurial commitment. More specifically, it is held that German industry is losing ground in "industries of the future" or "key sectors". Foreign trade and direct investment figures are the most common indicators used.

Before unification, (West) Germany and the United States were the two leading exporters of goods in the world. The two countries accounted for respectively 11.0 percent and 11.1 percent of total merchandise exports during the second half of the 1980s, followed at a distance by Japan with 9.2 percent.¹² After unification, Germany's share of world exports in goods sharply declined, from 12.2 percent in 1990 to 10.2 percent in 1993, which mostly reflects the diversion of western German exports from foreign countries to eastern Germany while eastern German exports to the former Soviet Union collapsed. In the following years, Germany's position in exports of goods deteriorated further, albeit less dramatically. In 1996, with 9.9 percent, it fell below the 10 percent level for the first time since the mid-1980s. In consequence, Germany now trails behind the United States (11.9 percent in 1996) whereas its lead over Japan (7.9 percent) has been maintained (Figure 1).¹³ Even in 1997, when exports were the engine of overall economic growth in Germany, the German world market share declined, which is however largely a technical "valuation" effect owing to the devaluation of the Deutschmark up to mid-1997 (Hinze 1998, p. 111).

German exports also show a number of *structural* weaknesses, among which underrepresentation in the field of high-technology goods and on regional growth markets stand out. The position of Germany as a leading industrialized country, with a high level of human capital and a sophisticated research infrastructure, would suggest a powerful presence of its exporters in *high-technology* trade. Yet Germany's share of OECD exports in this most expansive field of international business is relatively small (13.3 percent in 1995), if compared to its share in OECD exports of manufactured products as a whole (15.8 percent), and it is significantly lower than the respective (absolute and relative) shares of the United States (25.2 percent/15.6 percent) and of Japan (19.8 percent/14.0 percent).¹⁴

Figure 1
**Shares (percent) of world exports in goods: Germany, the United States,
 and Japan**



Source: WTO.

Germany is comparatively strong in exports of *medium-technology* products where it was the world market leader in 1995 (19.5 percent), together with Japan (19.3 percent) and far ahead of the United States (13.1 percent)¹⁵. The share of these products in total OECD exports of manufactures has been stagnant in recent years. German exporters in this field rely to a considerable degree on high-technology imports from other countries.¹⁶ Germany's stake in medium-technology trade is also increasingly challenged by newly industrialising countries. Dynamic Asian economies in particular, of the first and second generation are intensifying the production and export of these goods. Similar trends can be observed in Latin American countries, and the transition economies of central and eastern Europe are expected to join these country groups soon (Nunnenkamp 1996, p. 252). The geographic proliferation of the innovative potential thus threatens established German market positions in product areas where comparative advantages have hitherto been enjoyed as a matter of course.

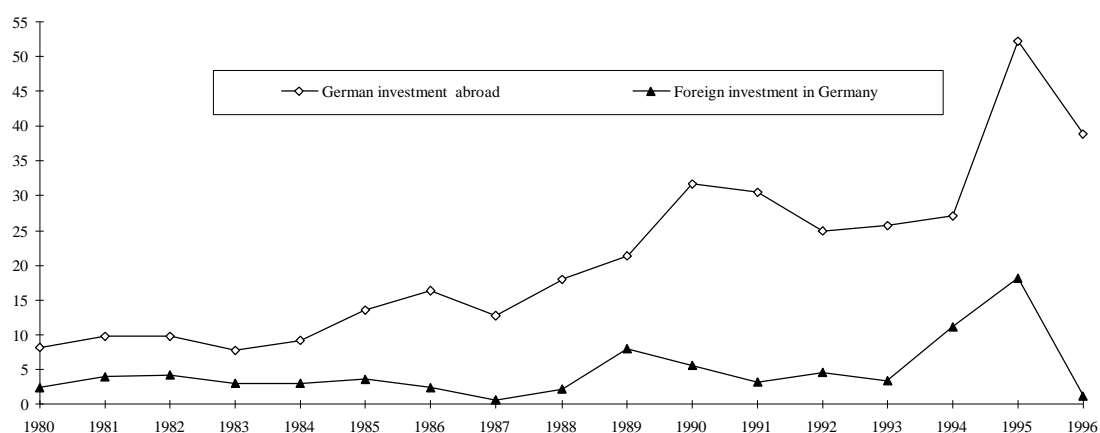
The *regional structure* of German exports still is closely geared towards relatively slow-growing markets in industrialised countries, and particularly those in western Europe, even though the EU share in German trade has fallen from about 60 percent to 55 percent during the 1990s.¹⁷ This corresponds with increasing shares of dynamic growth regions in other parts of the world, in particular Pacific Asia and Latin America, and of eastern European countries. Germany's exports to the Asian "tiger economies"¹⁸ rose from 3.3 percent to 5.5 percent of total German merchandise exports and those to central and southern American countries from 1.9 percent to 2.7 percent while shipments to

Germany's major trading partners in eastern Europe¹⁹ even doubled (from 3 percent to 6 percent) in relative terms between 1990 and 1997.²⁰

Nevertheless, the German export profile in Pacific Asia and Latin America remains low. In 1996, German exporters captured only 4.3 percent of Asian import markets (down from 4.5 percent in 1990),²¹ against 19.5 percent (20.9 percent) for Japanese companies and 13.9 percent (15.1 percent) for U.S. firms. The German part of Latin American imports shrank from 6.6 percent in 1990 to 4.6 percent in 1996, whereas the respective American and Japanese shares grew from 38.5 percent to 40.5 percent and 5.9 percent to 6.3 percent during the same period.²² In eastern Europe, by contrast, Germany is the dominant supplier. Its import share in the area has increased further in recent time (from 23.6 percent in 1993 to 24.8 percent in 1996) compared to the low and (slightly) declining percentages for the United States (3.9 percent/3.7 percent) and Japan (1.9 percent/1.8 percent) in these years.²³

The second indicator commonly used to characterize Germany's foreign economic position - direct investment (DI) - shows that a big gap has developed since the early 1980s between outward and inward capital flows (Figure 2). In 1996, investments by foreign companies in Germany almost came to a halt, amounting to little more than DM 1bn, whereas German firms in this year nearly invested DM 39bn abroad, thus leaving a record deficit of about DM 38bn.

Figure 2
Trends in German inward and outward direct investments (bn DM)



Source: Federal Ministry of Economics.

Similar trends occur in the field of investment in *knowledge capital* which is a special element of the general direct investment process. It has been the focus of much of the locational debate in Germany as intensified innovative activity, that is, the accelerated development of new products and production processes is the *conditio sine qua non* for achieving higher levels of real income and gainful employment. The share of gross domestic product (GDP) spent on research and development (R&D), which is the main-spring of innovation, has in fact declined steadily in Germany, from 2.9 percent in 1987-89 (the historical peak) to 2.3 percent in 1996, owing mostly to a real reduction of R&D expenditures in the company sector. In international comparison, Germany has clearly lost ground against trading partners in this area.²⁴

Declining R&D intensities in Germany concur with stagnant R&D activities of foreign companies in this country. German-based firms, on the other hand, in particular big companies, have quickly expanded their R&D engagement in foreign countries in recent time.²⁵ In 1995, R&D expenditures by German companies abroad (amounting to about DM 10bn, i.e. 17 percent of total R&D expenditure by enterprises in Germany) for the first time exceeded that of foreign firms in Germany (DM 9.5bn/15 percent) (BMBF 1997a, pp. 45-46). If current tendencies continue, a wide gap between “outward“ and “inward“ investment in knowledge capital could even evolve, similar to the general direct investment gap noted above.

In the R&D area, as well as in the field of direct investment in general, the problem is *not* the growing internationalisation of German firms, including global technology sourcing.. Outward investments by German companies often create the very conditions which are required to maintain existing levels of value added and jobs in Germany and to provide additional production and employment via successful export trade (Härtel, Jungnickel et al. 1996).²⁶ By the same token, conducting R&D in foreign countries in many cases also improves access to foreign know-how, thus enhancing the competitive strength of the respective company proper as well as the technological performance of its home economy (BMBF 1997, p. 55). The problem rather is that Germany itself has apparently fallen behind other countries as both a production place and a research and innovation location for increasingly globally-oriented corporations.²⁷ This sheds an unfavourable light on the quality - and cost - of immobile locational factors in Germany, including the economic-policy framework. Deregulation in the field of high technology, increased flexibility of the labour market, removal of bureaucratic investment obstacles, promoting the acceptance and application of new technologies, and a better match between science and industry are therefore also central issues of foreign economic policy in Germany.

III Main Lines of Development in German Foreign Economic Policy²⁸

After the Second World War, de facto sovereignty in trade policy was returned to the German government in November 1949.²⁹ (West) Germany quickly became a leader in trade liberalisation within the OEEC (which preceded the OECD).³⁰ It entered the European Economic Community in 1957 with a tariff level well below the average of the six member-states and was a driving force in lowering the Common Customs Tariff vis-à-vis third countries in the multilateral tariff negotiations of the 1960s and 1970s under the aegis of the GATT of which it had become an official member in October 1951.

The post-war period in Germany, up to the mid-1960s, thus came relatively close to the standard of market-oriented structural policy outlined above as the competitive approach to the domestic economy was matched by an open attitude towards foreign competition.³¹ The principles were non-interference by the government with private decisions on the way and composition of production, and free market access for domestic and foreign competitors. These principles were most effectively adhered to in the manufacturing industry, in construction, and in wholesale and retail trade. The most prominent deviations from the principles, on the other hand, were to be found in sectors such as energy, agriculture, housing, transport and communications, and healthcare. In agriculture and transport, in particular, government regulations were primarily intended to protect “incumbents” against domestic or foreign new competitors. The deviations were but recognised as non-conforming with the system and supposed to be removed at a later stage.

Since the mid-1960s, market-oriented policy gave increasingly way to one of structural *adjustment* and of deliberately *shaping* industrial structures. The aim was to promote industries of the future (“sunrise industries”) that were to create employment opportunities compensating for the loss of jobs in contracting (“crisis”) industries. It was accompanied by a policy of structural *conservation*, which has been practised with special “success” in the fields of agriculture and coal-mining. The reasons cited for the need to apply the brakes on structural change were the three tasks of securing jobs, securing income levels by fixing prices (e.g. in agriculture), and securing energy and other supplies (Willms 1992, p. 396). With numerous subsidy programmes following the 1974 recession, the gulf between liberal or “ordo-liberal” principles (in accordance with the influential Freiburg school of thought) and the interventionist policy applied in practice grew wider. Structural and related foreign economic policy in Germany in this second phase, which

lasted until the early 1980s, was based on the Principles of Sectoral Structural Policy (*Grundsätze der sektoralen Strukturpolitik*; BMWi 1968).

In the recession which followed the second oil price shock in 1979/80, the policy priorities changed once again. *Reducing* the level of subsidies now became a key objective of economic policy as sectoral subsidies apparently inhibited growth by delaying structural change and distorting competition. They had the effect of holding back factors of production for too long in relatively unproductive sectors of the economy. At the same time, the financial aid which was supposed to facilitate adjustment actually encouraged a subsidy-seeking mentality to develop, with the result that applying for renewed subsidies took precedence over making the necessary adjustment efforts. Despite the political “about turn” the volume of subsidies went on increasing for some time, though, partly because of government pledges already made in earlier years. They did not actually begin to go down until 1987 (Willms 1992, p. 371 ff.).

A second policy reorientation involved the *deregulation* of various parts of the German economy. Sectors which had traditionally been strongly regulated in Germany included agriculture, electricity and gas supply, healthcare, housing, freight transport, post and telecommunications, banking and insurance, and the labour market. The regulation involved was mainly of a legislative kind, restricting commercial and contractual freedom and restraining competition (restrictions on market entry, quality regulations, price controls). In order to see what potential for deregulation could be exploited, the federal government established a "Deregulation Commission" in 1988 to analyse what reforms were needed. The Commission found a particular need for deregulation in the insurance, transport and electricity supply sectors, and also in the labour market in general.

Additional pressure for deregulation, especially in the insurance and transport sectors, was generated by the completion of the Single European Market in 1993, the fundamental freedoms of which, in conjunction with the principle of mutual recognition among member states, impose clear restrictions on the scope for national regulations. This can be taken as evidence on the proposition that certain forms of regulation can only be counteracted on a higher level of decision-making (in this case supranational) where special interests have less opportunity to assert themselves (Olson 1965). Special interests emerge on this level too, however, and the deregulation currently taking place on a national basis does not necessarily exclude the possibility of closely ordered European markets sometime in the future (Basedow 1991, p. 370 ff.).

With a few cuts made in subsidies and regulations, and a number of *privatisation* measures enacted, particularly in the field of railways, post and telecommunications, Germany has certainly moved closer in recent years to the ideal of minimising growth-inhibiting intervention by the state. Programmes for structural conservation and the deliberate formation of economic structures in face of tough international competition are still alive, though, as are a multitude of regulatory devices and institutional features discouraging the engagement of internationally mobile factors of production in Germany. In addition to this, German *unification* has added a new dimension to the policy of subsidisation.

IV International Competitiveness and Domestic Competition: The Role of Competition Policy

Competition policy is a cornerstone of market-oriented structural policy in Germany while the Law Against Restraints of Competition (*Gesetz gegen Wettbewerbsbeschränkungen/GWB*) of 1957 is often referred to as the “constitution” or “basic law” of the social market economy. In its original version, the *GWB* was strongly influenced by the Freiburg School of “ordo-liberalism” according to which no individual market participant should dispose of any control over the formation of prices, i.e. perfect competition was to be the rule. Later on, the static model of perfect competition gave way to the more dynamic concept of “workable competition“, borrowed from the Harvard School of competition theory, which comes closer to the reality of oligopolistic competition on most markets.³² This change of paradigm in German competition policy has particularly manifested itself in the *merger* control procedures introduced into the *GWB* in 1973, together with a number of provisions that immunise *cooperation* among firms against antitrust prosecution. In the evaluation of a proposed merger, both static and dynamic efficiency aspects are now considered and weighed up against each other, if necessary.³³

German companies nonetheless often complain about too restrictive controls on mergers and acquisitions by the *Bundeskartellamt* (Federal Cartel Office). Stiff antitrust regulations are regarded as a locational disadvantage, if a merger is prohibited at home while allowed abroad. The business community accordingly calls for an industrial policy which, in the higher interest of overall industrial competitiveness, would deliberately suppress the prohibition of certain mergers, even though they might in themselves not be consistent with competitive market structures (Internationale Kartellkonferenz 1995, pp. 75 and 95). Empirical evidence, though, points to a *positive* connection between competi-

tion and international competitiveness. Companies which are subject to tough competition at home apparently also excel in competition abroad (Porter 1986 and 1990). It is also shown that this is particularly the case when strict competition policy goes hand in hand with liberal trade and investment policies.³⁴

Competition policy in Germany appears to be broadly in line with these findings and thus little receptive to the demands cited above. It is, however, oriented towards preserving competition on the domestic market only. This implies, on the one hand, a disregard of anti-competitive conduct originating in Germany but mainly effective in foreign countries while, on the other hand, competitive restraints on the German market which have their origin abroad would be subject to German law.³⁵ Typical cases are German export cartels (or international cartels with German participation) and foreign cartels affecting competition in Germany. A second - and more important - route through which considerations of international competitiveness, and thus industrial and foreign economic policy, may enter competition policy in Germany is *ex post* authorisation by the Minister of Economics of mergers prohibited by the Federal Cartel Office.

Export cartels are exempt from the general ban on cartels in Germany or may be authorised by the Federal Cartel Office upon application (Section 6 of the *GWB*). The former applies to *pure* export cartels, which are limited to the regulation of competition in *foreign* countries, whereas the latter holds for *mixed* export cartels, which also entail competitive restraints on the *domestic* market. Pure export cartels must “serve to protect and promote German exports“ (Section 6 (1) of the *GWB*, own translation), that is, they must be intended to strengthen the competitive position of the domestic member firms *vis-à-vis* their foreign competitors (Bundeskartellamt 1981, p. 134). Mixed export cartels must be approved, if it is demonstrated that the domestic restraints of competition are necessary for the desired regulation of competition outside the German territory to be effective (Section 6 (2) of the *GWB*).³⁶ The rationale behind this policy has apparently been to ensure that antitrust provisions do not hamper the ability of German firms to compete successfully against foreign firms which are not subject to equally restrictive rules (Hözlner; Braun 1982, p. 971).

Since 1957, 127 pure export cartels have been notified to the Federal Cartel Office of which 40 were still in force at the end of 1994. During the same period, 24 mixed export cartels were registered, of which only 2 are still active (Monopolkommission 1996, p. 402). All existing export cartels with German participation refer to markets outside the European Union. The declining significance of notified and authorised export cartels in

Germany also indicates a more restrictive policy stance adopted since the fourth amendment of the *GWB* in 1980, when the government acknowledged that export cartels limit and distort the free international exchange of goods and may impair efforts toward achieving price stability.³⁷ It is a logical consequence of this view that the privileged treatment of export cartels in Germany is to expire as part of the sixth amendment of the *GWB* which is presently in the stage of preparation (BMW_i 1997). Doing away with the export cartel privilege would also be a welcome extension of German competition policy to protect competition beyond the limits of the national market.

German cartel law also permits the formation of *import cartels*, if such agreements and decisions only regulate imports into Germany and if the German importers face market-dominating foreign suppliers (Section 7 (1) of the *GWB*). Import cartels cannot be authorised, if they infringe international treaties signed by Germany or if they lead to a substantial restraint of domestic competition (Section 7 (2) of the *GWB*). At present, there are no legalised countervailing import cartels, however, nor have there been any of importance in the past (OECD 1996a, p 96).

The other industrial political element in German competition policy noted above - *ministerial authorisation* of mergers and acquisitions - is of greater practical significance than the permission of export (and import) cartels. The Federal Minister of Economics may approve a merger project previously rejected by the Federal Cartel Office, for instance, if the international competitiveness of the companies concerned is at stake.³⁸ The project may accordingly go ahead, in spite of its presumed negative impact on competition, if it is recognised to produce considerable economies of scale for the national economy and/or ease access to financial resources, foreign procurement and sales markets, and technological know-how.

Since the adoption of preventive merger control in 1973, more than 100 mergers have been prohibited by the Federal Cartel Office in formal proceedings. In 16 of those cases, applications for authorisation were filed with the Federal Minister of Economics. Approval was granted six times, four of which were subject to conditions and restrictions. In another four cases approval was denied. In five cases the application was withdrawn. One case is still pending (Kinne 1997, p. 57). Strengthening international competitiveness was the second most frequently named reason for justifying a merger or acquisition after the argument that the merger could save jobs. Altogether, the instrument of ministerial authorisation, as the second (“industrial policy“) step of the German merger control

procedure, has nevertheless been applied rather sparingly to date and in a restrictive manner.³⁹

In the late 1980s, the planned merger between Daimler-Benz and MBB attracted particular attention regarding the process of obtaining ministerial approval. At the time, Daimler-Benz justified its merger with MBB *inter alia* with spillover effects which would result from activities in aerospace construction. However, considerable doubts were raised regarding this hypothesis. Nonetheless, ministerial approval was granted by the Minister of Economics at the time, and also endorsed by the majority of the monopolies commission, because it was hoped that the takeover of the aircraft construction company MBB by Daimler-Benz would encourage more entrepreneurial commitment to aerospace construction on the part of the private sector, strengthen the competence for “systems leadership“ in projects of international cooperation, facilitate economies of scope (“synergies“) and lead, in the longer term, to a marked reduction in state subsidies to this industry. On the other hand, there is no way of proving that the takeover was a successful strategy for the company which carried it out.

This merger and the intervention by ministerial approval which made it possible were the subject of utmost controversy in Germany. The very fact that there was such an intense debate surrounding this merger and that this was the first case of its kind can be seen as indicators of the federal government's fundamentally competition oriented policy stance which does not place industrial political aims on the same level as the competition principle of safeguarding competitive market structures.

V Foreign Economic Policy Implications of Subsidisation, Technology Promotion and Regulation

The two-edged strategy, as laid down in the Principles of Sectoral Structural Policy (*Grundsätze der sektoralen Strukturpolitik*) of 1968,⁴⁰ of assisting shrinking industries based on past technologies and simultaneously promoting industries and technologies of the future, has clear implications for foreign economic policy in Germany as it affects the position of these industries in international competition. The strategy is biased in favour of the former group of industries, though, and the measures directed at this lower end of the industry range have increasingly turned into structural conservation rather than adjustment policies.⁴¹ Government support to high-technology industries, by contrast, still is only a rather small fraction of the total amount of subsidies paid.⁴² On the whole, *sub-*

sidisation in Germany is heavily, and even to an increasing degree, skewed to the advantage of just a few sectors: the lion's share falls to agriculture, coal-mining, shipbuilding and the railways.⁴³ This entails disadvantages to other industries in the German economy which have to provide part of the money (via increased taxes) while competing with the favoured industries for scarce resources.

From a theoretical viewpoint, subsidies may be justified by market failure due to externalities, entry barriers or asymmetrical information. Even then, the theory only allows subsidies to be used if (a) there is no other, more efficient instrument available and (b) the costs of intervention do not exceed the welfare losses incurred due to market failure. Subsidisation policy in Germany hardly meets these criteria. This is not only true for the assistance granted in support of production, employment or investment but also for the subsidies in favour of R&D activities. It has been shown, for instance, that the sectoral structure of R&D subsidies in Germany stands in marked contrast to the pattern of R&D externalities, or spillovers,⁴⁴ as an overwhelming share of the aid payments goes to the aerospace industry which for its part is only an insignificant source of technological spillovers to other businesses.⁴⁵

This points to a *strategic* element in German technology policy which is mainly reflected in large-scale subsidies for the *Airbus*. Airbus Industrie - a joint venture between France, Germany, the United Kingdom and Spain - can be seen as an exercise in international competition policy as well as in strategic trade and industrial policy aimed at international "rent-shifting". It has been successful in breaking a (de facto) US monopoly in wide-bodied aircraft manufacturing and transforming it into a transatlantic dyopoly, and it has thus diverted economic rents from America to Europe. It is, however, far from evident that this has also resulted in a net economic benefit for the European partner countries in the consortium as the taxpayers in these countries had - and still have - to foot the bill for restructuring the market. It must also be recognised that in view of the large economies of scale and scope in this industry, economic inefficiencies may have arisen from the market entry by Airbus which reduce the overall economic benefit.⁴⁶

Outside aerospace, however, Germany appears to have largely abstained from policies directly targeting "strategic" high-technology industries. Semiconductors are frequently named as a case in point.⁴⁷ It is held that semiconductor policies in Germany are different from those applied in other countries in that most of the support measures for this industry are of a horizontal nature rather than industry-specific as in countries like Japan, South Korea and Taiwan or, within Europe, France (Hilpert et al. 1994).⁴⁸

On the whole, *technology policy* in Germany is directed at specific projects or technologies rather than industries. It is presently guided by the concept of promoting (cross-sectoral) “lead projects“ (*Leitprojekte*) which is seen as a complement to the principle of providing the right framework of conditions for “the build-up of sufficiently attractive centers of industrial competence also in the future“ (BMBF, BMBWi 1996, p. 6). The policy of project related research funding has been called into question, though, as it frequently distorts competition and places smaller firms at a disadvantage with respect to larger ones (Kantzenbach, Pfister 1996). A related point of criticism refers to possible adverse effects on competition caused by cooperation among companies in the field of R&D. These are allegedly disregarded by competition authorities in Germany (Pfähler, Bönte 1996, p. 77). R&D consortia are indeed the preferred recipients of project-related public R&D funds in Germany (Kantzenbach, Pfister 1996, p. 287), and in the merger case of Daimler-Benz/MBB in 1989, for instance, avoidance of parallel research was one of the reasons for “greenlighting“ the merger in spite of the increased market power involved (Monopolkommission 1989).⁴⁹

A closely linked issue, which is of particular relevance to foreign economic policy, refers to the freedom of *foreign access* to government-sponsored technology programmes in Germany. This issue has been especially controversial in the United States. U.S. policy in this area is guided by a national benefits test, i.e. foreign participation must further the economic interest of the United States, as evidenced e.g. by local investments in R&D, and by efforts to establish bilateral reciprocity, i.e. American companies must be allowed comparable access to technology programmes in the participant’s home country (OTA 1994). Apparently, the two criteria can conflict with one another. German technology policy avoids any such conflict as it does not require reciprocity. Subsidiaries of foreign-based firms are allowed to participate in Germany’s R&D programmes provided that this is in the German interest.⁵⁰ According to the BMBF Project Manual, the relevant criteria for the granting of subsidies in this context are as follows:

- that the company maintains a permanent branch presence in Germany with a sustained capacity for engaging in R&D;
- that the research project will be conducted in Germany for its full duration;
- that the results of the R&D will be utilised in local production facilities in Germany;
- that any transfer of the R&D results to non-EU countries will be subject to controls.

This policy is in line with the general tendency among OECD countries to make government R&D support dependent on performing the R&D in the financing country and exploiting the results of the R&D to a maximum extent in that country in order to ensure domestic spillovers from supported R&D and to contain free-rider behaviour (OECD 1996b, p. 58).

A more controversial area is the policy of *regulation* in Germany. Germany is frequently depicted as an over-regulated economy where legal provisions, administrative orders and lengthy procedures (including court procedures) suppress the initiative of private enterprise, curb investment activities and increase the prices of key inputs.⁵¹ The bureaucratic burden on business has been estimated at about DM 60 bn per year which is DM 3640 per job in the business sector; for small and medium-sized enterprises, the estimated per-capita burden is even DM 6840.⁵² Regulation has apparently exceeded its original objective which is to correct for market failure and provide public goods.⁵³ It is often motivated by an attempt to satisfy special interests to protect them against unwelcome competition. This has far-reaching implications for foreign economic policy.

Regulation may well strengthen the competitive position of domestic producers and consequently also attract international investors. This will be the case, for instance, if standardisation requirements serve to reduce transaction costs and improve quality. On the other hand, regulation may act as a deterrent to internationally mobile capital if its effect is to raise production costs or put up barriers to the entry of new producers into the market (or to the exit of established suppliers), including those from abroad. On balance, regulation in Germany seems to *impair* rather than enhance commercial opportunities and thus diminish the attractiveness of Germany as a business location.⁵⁴

VI Export Promotion and Import Policy

In the “classic“ areas of trade policy, which concern direct intervention on the export or import side of trade with *goods*, the German government has traditionally been committed to an open international trading environment and non-discrimination among trading partners. Within the European Community, the government has used its influence in favour of a liberal common external trade policy and against the emergence of a “Fortress Europe“. Domestically, non-tariff barriers to imports were removed for a wide range of manufactures or simply not enforced (Paqué, Soltwedel et al. 1993, p. 23). Export policy has concentrated on improving foreign market access for domestic firms rather than dis-

criminating against foreign competitors. In the case of trade with *services*, on the other hand, Germany takes a more restrictive stance. This is particularly so when liberalisation involves large-scale labour migration, as in construction and some consumer services.⁵⁵

In the field of *export promotion*,⁵⁶ two basic forms can be distinguished:

- Dismantling of trade barriers which bar access to export markets. In analogy to the term "negative" integration or liberalisation, this form can be called "negative" export promotion.
- In contrast, "positive" export promotion entails direct state support for export activities in the home country, e.g. by providing information, covering risks or providing grants for interest payments.

Negative export promotion has been the most important instrument of foreign trade promotion in Germany. It is embedded in trade policy by the European Union aimed at opening third-country markets for European companies in bilateral and multilateral negotiations on a reciprocal basis, that is, as a *quid-pro-quo* for opening the European market to foreign enterprises. Germany also endorses the "new market access strategy" launched by the European Commission in February 1996.⁵⁷

Positive export promotion, on the other hand, has remained a largely national matter, a number of constraints on Germany's freedom of action in this area notwithstanding. These include Article 92 of the EC Treaty prohibiting export promotion measures by member states that directly or indirectly distort competition and impair trade within the Community;⁵⁸ WTO subsidy rules which prohibit export subsidies on industrial products (Art. 3 of the Agreement on Subsidies and Countervailing Measures) and allow for retaliatory measures to be taken by the countries affected if these rules are violated (Art. 4); and the OECD consensus on export credits stipulating minimum interest rates for long-term official loans granted to finance export transactions.

The federal and provincial (*Länder*) governments in Germany have numerous instruments of export promotion at their disposal. According to their primary intention, the instruments may be grouped into (1) export subsidies which artificially improve the competitiveness of export products; (2) measures aimed at reducing export risks such as state securities and guarantees; and (3) measures aimed at improving export marketing, e.g. by means of supporting collective self-help measures on the industrial association level (Tuchtfeldt 1984, p. 204 ff.). Actual export promotion measures do, however, not always easily fit into this scheme. A striking example is the *exchange rate guarantee* for

the Deutsche Airbus GmbH of 1989 which went far beyond a mere insurance measure to an outright subsidy.⁵⁹ It was the subject of sharp international controversy. In January 1992, a GATT panel set up on request of the United States declared the German exchange rate guarantee to be inconsistent with GATT as it constituted an export subsidy as prohibited in the GATT subsidy code. The federal government thereupon suspended the measure, which was intended to last until 1998, as from January 15, 1992.⁶⁰

Relief for *financing* exports is provided in the form of low-interest loans with interest rates which remain below market interest rates. Medium-term loans for up to four years, for example, are available from the *Ausfuhrkredit-Anstalt* (Export Credit Agency). The *Kreditanstalt für Wiederaufbau* (Credit Agency for Reconstruction) offers long-term loans on preferential conditions for financing exports of industrial goods to developing countries. The interest rate advantages are relatively modest, however (Bartling, Hemmersbach 1995, p.345). In the case of export *insurance*, which is dealt with by *Hermes* and *Treuarbeit*, elements of market economics carry considerable weight since the political and economic export risks are covered for a fee and an "own share" has to be borne by the exporter in the case of loss or damage. Little contentious is also the support granted at the federal and *Länder* level for the participation of companies (typically small and medium-sized firms) in international *trade fairs and exhibitions*. Finally, a key instrument of market-oriented export policy in Germany is the provision of export-related information by the *Bundesstelle für Außenhandelsinformation* (Federal Office for Foreign Trade Information), the *Außenhandelskammern* (Chambers of Foreign Trade) and the official German representations abroad which together form the three-pillar system of trade promotion in Germany.

On the whole, the economic effect of positive export promotion in Germany appears to be rather small. There is little proof of any significant consequences for the structure of exports either in terms of the goods exported or of the regions to which they are exported (Donges 1992, p.19). At the same time, economic policy to some extent even tends to *impede* exports as it restrains in some cases the import of intermediate products through duties and quotas; import protection thus works as a tax on exports. The mechanical engineering, motor vehicle construction and electrical engineering industries are considered to be particularly disadvantaged in this way (Donges 1992, p. 21 f.).

As far as *import policy* is concerned, it is common to distinguish between border measures and non-border measures. Whereas in the former category of import policy Germany's scope for independent action is very limited indeed, and is often virtually non-

existent, it is broader in the latter one. Among the *border measures*, voluntary export restraint arrangements (VERs) and quantitative import restrictions (quotas) have been domains of relatively autonomous policy making by member states within the Community. However, with the exception of the 1981 car agreement with Japan which limited Japanese car exports to Germany to 110 percent of the previous year's level (Weiss et al. 1988, p. 12), Germany has hardly ever made use of *VERs*. Today, as a result of the European single market and the narrow scope for border controls, there is little latitude for implementing national VERs. Moreover, the Uruguay Round agreed to remove existing VERs and to ban new ones. This has been explicitly recognised in the new general import regulation of the EU adopted in December 1994 (Glismann 1996, p. 27).

Regarding *quotas*, Germany maintains a number of import restrictions against the People's Republic of China the economic impact of which has recently been analysed (Glismann 1996).⁶¹ It is estimated that removing the restrictions would threaten roughly 650 jobs at the most in all the four production areas analysed in the study (certain kinds of footwear, toys, tableware, and textiles). This indicates a small impact of protection on employment even at the sectoral level. At the same time, the calculated (static) welfare losses (including foreign "capture" of the quota rents) caused by the measures amount to an upper value of DM 253 million in 1994 in the four industries combined, i.e. almost DM 400000 per job saved. The study thus concludes that the quotas cannot be justified economically and should therefore be abolished.

Prominent among *non-border import measures* is the definition of industrial norms and standards and the allocation of public contracts. Even though in both areas international and European rules limit the possibilities of national policy, a number of loopholes still exist. In the field of *standards*, health and safety provisions, for instance, are commonly exempted from existing harmonisation or mutual-recognition requirements. This creates scope for industrial policy in industries such as pharmaceuticals, engineering, foodstuffs, and precision medical equipment in particular (Reilly 1995). Empirical investigation nevertheless leads one to believe that Germany has made little use of these options so far (Koopmann, Kreienbaum, Borrmann 1997, p. 92f.).

With regard to *public procurement*, the very low percentage of contracts awarded to foreign businesses suggests that true liberalisation is still a far cry off in this area.⁶² Complaints raised by foreign companies constitute a further indicator. American steam turbine suppliers, to give an example, complain that they have no chance in the German electricity market because the international invitations for tenders in the electricity market are

allegedly "not serious".⁶³ Without being able to examine these cases in detail, they do demonstrate that within the current legal framework there are ways and means to fight off imports and to favour national "court suppliers".

VII Reforming Foreign Economic Policy

Globalisation and the related intensification of international competition is hardly the principal reason for the economic ills that have plagued Germany in recent years. Rather than creating the problems in the first place, globalisation probably has intensified them and unveiled their causes (Deutsche Bundesbank 1997, p. 7). Its chief characteristic is to enhance the flexibility of production structures, with specialisation along activity/value-added lines increasingly replacing product-related division-of-labour. This entails continuous structural change, typically within industries and companies, but at the same time reduces the risk of structural shocks (Härtel, Jungnickel et al. 1996, p. 261 ff.). Globalisation also means that locational competition is increasingly gaining in importance. In a broad sense, locational competition has three interdependent dimensions (Siebert 1997, p. 177). It is competition (1) between companies on global product markets, (2) between governments on the international markets for mobile factors of production, in particular physical and knowledge capital, and (3) between immobile resources such as large sections of the labour force. A major implication is the growing internationalisation of policies that were previously considered to be predominantly domestic. The broad challenge to foreign economic policy in Germany is therefore to

- create the appropriate infrastructure (physical and human), institutions (including regulations, standards, approval procedures, etc.) and legal and economic framework, and
- remove market and government failures impeding the effective use of resources,

in order to strengthen the position of German firms in international competition and increase the attractiveness of Germany to foreign companies.

Policies with a more indirect impact on international trade and investment concern the labour market and the tax system. *Labour markets* in Germany are characterised by relatively low worker mobility/flexibility and relatively high wage rigidity. Reforms would have to have a number of objectives:

- ending the policy of subsidising outdated production structures which gives workers the impression that adjustment to market forces can be postponed or need not be made at all;⁶⁴
- spending a larger proportion of funds on activities that make labour more flexible, that is, education, retraining, etc.;
- increasing the flexibility in wage determination to allow for greater wage differentiation between companies, regions and qualifications;
- relaxing rigid work rules, e.g. concerning working hours and contracts;
- reducing non-wage labour costs.⁶⁵

In the field of *taxation*, the challenge is to make the trade-off between the taxes levied on (foreign and domestic) investors and the public goods, e.g. the infrastructure, offered in return as conducive to growth as possible. Reforms in this area should concentrate on lowering tax *rates* while broadening the tax *base* and simplifying the whole system; eliminating taxes that are unrelated to profits; and removing the bias against risk-bearing equity capital, and venture capital in particular, which is taxed more heavily than income from loan capital.⁶⁶

Among the policies more directly related to foreign-economic transactions, competition control, technology promotion, subsidisation, import restriction and export enhancement are prominent. In the field of *competition control*, what matters most in the present context is to extend the reach of *national* competition policy into protecting competition on *foreign* markets as well. The planned abolition of the export cartel privilege in Germany would be a welcome step in this direction. Countries should also be enabled to obtain redress of *foreign* competitive restraints harming *domestic* competition (Siebert 1997, p. 223).

The basic rationale for *technology policy* is to correct for market failure arising from the existence of external effects or spillovers between economic agents. It is, however, unlikely that the state will be capable of determining the scale and origin of external effects with sufficient accuracy, or that government bodies have the right information available as to what the key technologies are which are felt to be so vital for success in the technology race. The state might be better advised to retire to a position in which it simply stakes out the frame conditions needed to encourage innovation, while leaving the actual choice of technologies to companies themselves. The alternative to the "presumption of knowledge" (Hayek 1975) would be the blanket promotion of research, which taken to its logical conclusion means the state funding an equal percentage of R&D expenditure in

all fields (including the subsidisation of human capital in R&D). At least this would avoid the competitive distortions which the project-oriented approach to technology policy in Germany inevitably entails. Given the reality of selective national technology programmes, however, non-discriminatory participation of *foreign* companies in such programmes should at least be guaranteed. The programmes should also seek to avoid imposing constraints on participants concerning the transfer or deployment of resulting technologies. In this context, the idea of an “open international subsidy club“ for high-technology development has also been proposed (HWWA, IfW, NRC 1996, p. 206 ff.). It would allow club members free access to each other’s subsidy funds in the field of R&D. R&D subsidies might in this case even exceed internationally agreed thresholds. Foreign access would not depend on cooperation with a domestic firm. Domestic and foreign firms would have to be treated equally with respect to patents and copyrights that emerge from the funded research. Open subsidy clubs could thus be one way to cope with the problem of international knowledge spillovers.

It has been shown above that shrinking (and internationally non-competitive) industries have won an increasing share of total *subsidies* in Germany. This has delayed structural adjustment, preserved outdated structures and impeded the emergence of new, innovative branches of industry and thus also of competitive jobs. It is therefore necessary both to reduce existing subsidies substantially and to redirect support policies in favour of young, technology-oriented enterprises. For these firms, a discrepancy between high innovative capabilities on the one hand and limited access to capital markets on the other has been observed (Koopmann, Kreienbaum, Borrmann 1997, p. 114 ff.). Besides the granting of financial assistance, structural/institutional reforms in the financial sector are therefore needed, in order to overcome existing market failures. A step in the right direction has been the creation of the “New Market“ for risk capital at the Frankfurt stock exchange, which is in operation since March 1997.

Germany should remove still-existing *import quotas* in traditional industries like textiles, leather, ceramics and toys. These trade restrictions cannot be justified economically as the welfare costs per job saved by far exceed the wages actually paid. Within the European Union, the government should support more fundamental reforms of *anti-dumping* policies. In this highly sensitive area of trade policy, more rigorous economic analysis of the products and markets affected by anti-dumping investigations is needed, and a broader range of economic interests (including, besides producers, also importers, retailers and users, in particular) should be taken into account, so as to protect *competition* rather than (domestic) *competitors*. Germany should also promote the application of

uniform *technical standards* in international trade as well as the mutual recognition of standards and related conformity assessment procedures among trading partners. The latter would realistically have to proceed in bilateral or plurilateral negotiations rather than at the multilateral level. In the area of *government procurement*, it must make sure that the new disciplines agreed in the corresponding WTO agreement, including the new challenge procedure, are effectively applied at home in order to guarantee national treatment of foreign suppliers.

Export promotion in Germany needs a common strategy and a better coordination of activities between government and industry as well as between different government agencies at the federal and *Länder* level. A number of steps have already been taken in this direction, such as the development of regional concepts/initiatives for Asia and Latin America by the federal government (with companion committees on the side of industry), the creation of German Centres for Industry and Trade (*Deutsche Häuser*) in Shanghai and Singapore,⁶⁷ and the constitution (in December 1995) of an inter-ministerial committee on “External Economic Relations“ for the better integration and coordination of promotional activities. Further measures could include:⁶⁸

- providing more comprehensive information (via Chambers of Commerce, embassies, regional conferences, industry fairs, etc.) on products and solutions that German industry can offer, e.g. in the field of infrastructure development and environmental protection;
- centralising information on what promotional instruments are available to companies;
- intensifying provision of information to small and medium-sized enterprises (SMEs), including active intermediation between German and foreign business partners⁶⁹;
- enhancing the cooperation in education and training with less developed trading partners;
- permanent “benchmarking“ with regard to export promotion measures applied in competing countries.

An important instrument of export promotion in Germany is also the tying of exports to development aid. This may be appropriate in a situation of unemployment, in which it would be comparable to a fiscal demand stimulus and superior to a subsidy on the supply side, but *aid tying* may cause international friction if it is combined with commercial export financing.⁷⁰ Such “mixed credits“ tend to distort international competition and provoke counter-measures which are generally distortionary.

In view of the growing gap between outward and inward direct investment noted above, finally, the question of restricting cross-border capital flows has been raised in Germany. However, possible action against the relocation of production would immediately run into the problem of differentiating between “good“ and “bad“ relocations which is hardly feasible due to lack of information.⁷¹ At the same time, there is little reason to accord foreign investors *preferential* treatment in Germany, e.g. in the field of taxation. For one thing, effective relief might not occur, if the investor’s foreign income is also taxed at home. For another, the discrimination of domestic investors would encourage tax avoidance, e.g. through the construction of international tax-saving schemes.⁷² Germany should also shun the international race for investment *incentives* and work towards a multilateral agreement on this issue.⁷³

Notes

- ¹ Limitations on space make it impossible deal with the macroeconomic aspects of German FEP, i.e. Germany’s role in the various “processes“ and “groups“ which have been established at the international level in an effort to coordinate macro-policies among trading partners or to organise cooperation between them in this area.
- ² Federalism is particularly important in view of regional concentrations of sectoral problems. Examples are coal mining in North Rhine Westphalia and shipbuilding in the coastal Länder.
- ³ On the question of how it is possible for small groups to be better organised than large ones, see Olson 1965. Privileges may be granted in the form of subsidies, levies on competitive substitutes, and

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- administered pricing or via restraints of competition which do not impose any direct burden on the public-sector budget and are manifested in such phenomena as barriers to market entry, occupational regulations and stipulations, and the regulation of freight transport, energy supply, and so on.
- ⁴ “Encompassingness“ in the sense of Olson (1982) means that the organisations involved in the decision-making process cover divergent sectional interests and thus take account of the costs that a protective measure benefiting one section may impose on other sections.
- ⁵ The latest BDI guidelines on trade policy bear witness to this: Removal of (sophisticated) non-tariff barriers to trade, liberalisation of (industry related) services, further reform of the (trade-distorting) Common Agricultural Policy of the EU and defining (liberal) rules for trade and investment in the WTO in view of the internationalisation of production are the declared top BDI priorities in the trade field (BDI 1997, p. 5).
- ⁶ With the exception of shipbuilding and textiles and clothing, the most protected industries in Germany are indeed not covered by this institutional framework. In these cases, either the European Community is held responsible (agriculture and food processing, coal and steel) or the industries are in effect nationalised (coal-mining) or they have (explicitly or implicitly) their own ministries (agriculture, aerospace) (Weiss et al. 1988, p. 53). The political economy explanation of protection in Germany is to some extent supported by statistical analysis (Weiss et al. 1988, p. 67 ff.). For the period of 1978 to 1985, i.e. the so-called era of the new protectionism, it is shown that an industry’s share in the increase in effective total protection (tariffs plus implicit tariffs plus subsidies) grows (1) with its voting power (proxied by the number of employees), (2) with the degree of firm concentration (measured as the market share of the six largest firms) and (3), though less significantly, with the degree of regional concentration (measured by the coefficient of variation across the Länder). According to the regression, an industry is also more likely to obtain protection in Germany if its international competitiveness, due to relatively little use (or slow accumulation) of human capital, is weak or declining. The state of international relations or the international negotiating environment, finally, as reflected in the initial level of protection, is shown to impair an industry’s chance of gaining (or preserving) protection.
- ⁷ According to the 1997 report on state aids in the EU (European Commission 1997), Germany is second only to Italy in state aid per employee in the manufacturing industry, with an average of Ecu 2,012 in 1992-94 (Italy: Ecu 2,379), up from Ecu 1,514 in 1990-92 (Italy unchanged). The total EU average fell from Ecu 1,419 to Ecu 1,296. However, the level of per-capita state aid in the old Länder is among the lowest in the EU (with Ecu 553, down from Ecu 921), whereas the new Länder top the league by a wide margin (with Ecu 11610, up from Ecu 5415). One of the most controversial disputes between the European Commission and Germany concerned the subsidies granted to Volkswagen in the eastern state of Saxony part of which were considered unlawful by the Commission as they impeded trade and distort competition within the Community. The case was finally resolved when the German government agreed to recover the contentious subsidies in exchange for the Commission allowing an equivalent amount of aid to be paid to a Volkswagen plant in the western state of Hesse for the development of a new type of automatic gearbox. Cf. Financial Times, November 19, 1997: “Commission resolves VW row“.
- ⁸ The bone of contention was Article 2 of the EC Merger Control Regulation of 1989, the “French Clause“. It qualifies competition criteria with considerations of industrial policy, such as technological and economic progress, in the evaluation of merger projects. The final wording of Article 2 seeks to reconcile these potentially conflicting criteria in that it is required that technological and economic progress must be in the interest of consumers and not impede competition. However, in a number of instances, the German government took advantage of the broader discretionary scope available to the Commission in merger cases. An example is the takeover of Kässbohrer (a German bus manufacturer) by Mercedes-Benz (the leading supplier of buses on the German market) which would have been prohibited by the German Federal Cartel Office but suited the German government well as it sought to preserve jobs. For similar reasons, the Federal Ministry of Economics pleaded against the case of the merger between Kali und Salz (a subsidiary of BASF) and Mitteldeutsche Kali AG being referred back from Brussels to the Federal Cartel Office.
- ⁹ At the Maastricht negotiations, the first draft of Title XIII met with fierce resistance in Germany against the new Community powers for which it provided. Finally, a compromise formula was agreed

staking out what the fundamental stance should be (“in accordance with a system of open and competitive markets”), asserting the principle of unanimity in decisions on “specific measures“, and ensuring that competition must not be distorted by any measure taken under the provision. However, given the usual practice of bundling several issues into compromise solutions, the formula may actually provide only limited protection against a dirigiste industrial policy (Monopolkommission 1992).

¹⁰ When the question arose as to who would be authorised to sign the documents resulting from the Uruguay Round of WTO negotiations, the European Court of Justice decided on 15th November 1994 that the Community should only have sole responsibility on matters concerning the trade in goods, and hence for signing the new GATT agreement, whereas the GATS agreement on services and the TRIPS agreement on intellectual property rights would require additional ratification by the member states. This judgement also constrained the Community’s powers in respect of other international agreements such as those concluded with the countries of central and eastern Europe.

¹¹ Cf. Financial Times, March 12, 1997: “Brussels strives to call the tune on trade.“ In the intergovernmental conference reviewing the Maastricht Treaty a compromise was finally reached on Article 113. The Treaty of Amsterdam has added the following new paragraph 5 to Article 113: “The Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament, may extend the application of paragraphs 1 to 4 to international negotiations and agreements on services and intellectual property insofar as they are not covered by these paragraphs.“

¹² If trade with commercial services is also included, the U.S. was clearly ahead, however, with 12.1 percent of the world total, whereas the relative positions of the former Federal Republic and of Japan, with 10.2 percent and 8.6 percent, respectively, remain largely unchanged (Source: WTO, Annual Report 1996, Volume II, Tables A3 and A5).

¹³ Over the whole period from 1990 to 1996, the average share of world exports in goods was 10.7 percent for Germany, 11.9 percent for the United States, and 8.8 percent for Japan (Source: WTO, Annual Report 1997, Volume II, Table A3). If exports of goods and services are considered, the United States was ahead with 12.7 percent in 1996 compared to 9.3 percent for Germany and 7.3 percent for Japan. Between 1990 and 1996, the average share of world exports in goods and services was 9.9 percent for Germany, 12.8 percent for the United States, and 8.1 percent for Japan (Source: WTO, Annual Report 1997, Volume II, Tables A3 and A5).

¹⁴ Cf. BMBF 1997a, Table A.1.3. High-technology products are those products in which R&D expenditures account for more than 8.5 percent of sales. The relative export share indicates the extent to which a country’s share in total (here: OECD) exports of a specific product group (here: high-technology products) differs from its share in overall (here: manufactured) exports.

¹⁵ Cf. BMBF 1997a, Table A.1.3. Medium-technology products are products with R&D shares between 3.5 percent and 8.5 percent.

¹⁶ Dependency on foreign high- technology supplies has raised concerns that Germany might become the “technological hinterland“ or “colony“ of the United States and Japan, and an argument has been made for strategic trade policy to protect the domestic production of key technologies and thus secure the future competitiveness of the German economy. Seitz (1990), in particular, points to an alarming fall-back of German companies in five major technology fields that are assumed to be the most important ones for the future, namely information technology, biotechnology, new materials, new energy sources, and space technology. He concludes that a coordinated and powerful attempt of all social groups - meaning in particular the government, employers and unions - is needed in order to counter the secular decline in the technological position of Germany. For a critical review of this position cf. Paqué, Soltwedel 1993, p. 26.

¹⁷ To some extent, this is a technical effect reflecting the new reporting system for intra-EU trade since the completion of the internal market in 1992 (Hinze 1998, p. 111).

¹⁸ Hong Kong, Singapore, South Korea, Taiwan (“first generation“), Indonesia, Malaysia, Philippines, Thailand (“second generation“).

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- ¹⁹ Czech Republic, Hungary, Poland, Slovak Republic.
- ²⁰ The figures for 1997 refer to January-October (Hinze 1998, p. 112).
- ²¹ Asia excluding Japan and the Middle East.
- ²² Source: IMF, Direction of Trade Statistics, Yearbook 1997.
- ²³ Figures refer to combined imports into the Czech Republic, Hungary, Poland and the Slovak Republic. 1993 was chosen as reference year because separate data for the Czech and Slovak Republics are not available for earlier periods. Source: IMF, Direction of Trade Statistics, Yearbook 1997.
- ²⁴ Among the OECD economies, Germany fell from second to sixth place in total R&D and from first to fifth in corporate R&D (Source: OECD, Main Science and Technology Indicators). Latest German figures indicate a possible reversal of the downward trend as German companies, according to a survey of the Stifterverband für die Deutsche Wissenschaft, spent DM 61.7bn on R&D in 1997, i.e. 3.6 percent more than in 1996 (Handelsblatt of 18.2.1998: "Wirtschaft setzt wieder auf Forschung").
- ²⁵ The newly established R&D facilities are in most cases closely linked to existing production activities.
- ²⁶ Only 15 percent of German foreign investments have been carried out in countries with dramatic cost differences (central and eastern Europe, South East Asia) and can thus be regarded as substitutes for domestic investments, while western European countries and the United States have been the targets of 65 percent and 20 percent, respectively. In these cases, a complementary relationship is likely to prevail (BMBF, BMWi 1996, p. 12).
- ²⁷ In other words, rather than the high level of outward investment (in physical and knowledge capital), the small quantity of inward DI is cause for concern in Germany.
- ²⁸ This section largely draws on Koopmann, Kreienbaum, Borrmann (1997, pp. 37-43).
- ²⁹ De jure (though constrained) sovereignty followed in March 1951 when the Allied High Commission ceased to sign German trade treaties (Weiss et al. 1988, p. 109).
- ³⁰ About two thirds of German imports were free of quotas by 1952 (Erhard 1954, p. 116). Unilateral liberalisation steps were believed to be the best form of export promotion (Erhard 1954, p. 244). Negotiations about the new German tariff code (to replace the von Bülow tariff of 1902) were nevertheless dominated by special interest groups with a protectionist bias, most notably agriculture, textiles, steel and the chemical industries (Weiss et al. 1988, p. 112).
- ³¹ The principles were non-interference by the government with private decisions on the way and composition of production, and free market access for domestic and foreign competitors. These principles were most effectively adhered to in the manufacturing industry, in construction, and in wholesale and retail trade. The most prominent deviations from the principles, on the other hand, were to be found in sectors such as energy, agriculture, housing, transport and communications, and healthcare. In agriculture and transport, in particular, government regulations were primarily intended to protect "incumbents" against domestic or foreign "new entrants". The deviations were but recognised as non-conforming with the system and supposed to be removed at a later stage.
- ³² The strong expansion of the German economy during the 1950s and 1960s went hand in hand with a sharp increase of concentration and a growing discrepancy in the structure of company sizes. Competition policy responded to this development by advancing the idea of cooperation. Small and medium-sized firms were to combine entrepreneurial functions in order to increase efficiency. In line with this policy of "compensation for structural disadvantages" (Hansen 1989, p. 379), the first and second amendment of the GWB (in 1965 and 1973) at first exempted specialisation agreements and then other forms of cooperation from the general ban on cartels laid down in Section 1 of the GWB.
- ³³ Above certain turnover thresholds, merger projects have to be notified before completion. They must be prohibited if they are likely to create or strengthen a dominant position on the relevant market, provided there is no improvement in the conditions of competition that more than compensates for the disadvantages of market dominance (Section 24 (1) of the GWB).
- ³⁴ A study by the McKinsey Global Institute on productivity differences in nine sectors (autos, auto parts, metalworking, steel, computers, consumer electronics, soap and detergent, beer, processed food) in Germany, Japan and the United States shows that industries which face only local competition have on average a lower level of (labour) productivity than the same industries which are forced

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- to compete on a regional or a global level (McKinsey Global Institute 1993, Chapter 3, p. 14). The results of the McKinsey study are confirmed by a survey of German companies according to which businesses geared to global markets demonstrate not only higher productivity levels, but also greater innovative input and success (ZEW 1994). For a general discussion of the relationship between competition and international competitiveness cf. Kinne 1997, pp. 26-35.
- ³⁵ The latter is in line with the “effects doctrine“ (laid down in Section 98 (2) of the GWB) while the former reflects the principle of territoriality in competition policy.
- ³⁶ Authorisation must be denied if the agreements violate international treaties signed by Germany or if they substantially restrain domestic competition (Section 6 (3) of the GWB). In legal terms, Germany is nevertheless more generous towards mixed export cartels than most other countries, which legally treat such agreements like domestic cartels. This is the case, for instance, in the United States, the United Kingdom, France and the Netherlands. Japan and Canada, on the other hand, grant mixed export cartels preferential treatment similar to that provided in Germany (Großmann, Koopmann et al. 1998, Ch. 5).
- ³⁷ “Export cartels limit and distort the free international exchange of goods by regulating quantity, price and distribution. They may impair efforts toward achieving price stability. The distortions of competition that they cause not only impair domestic competitors, but in our opinion they also harm the consumer who is not able to have as good a position with respect to the joint action of exporters as against individual sellers Answer of the Federal Government to a Letter of Inquiry in the Parliament (Deutscher Bundestag), reprinted in Hölzler; Braun 1982 (translation in ABA 1991, p. 73).
- ³⁸ According to Section 24 (3) of the GWB, for a merger project to win ministerial approval, “the restriction of competition (must be) outweighed by the advantages of the merger to the whole economy or the merger justified by a predominating public interest, whereby the competitiveness of the companies concerned in markets outside the sphere of authority of this law is to be taken into consideration” (author’s translation).
- ³⁹ This is even more so in the case of ministerial authorisation of cartels. According to Section 8 (1) of the GWB, the Federal Minister of Economics may authorise a cartel exceptionally if the restraint of competition is necessary for overriding reasons connected with the economy as a whole and the public interest. Only six applications for authorisation were filed under this provision, of which four were granted (Monopolkommission 1996, p. 403). Currently, there are still two such authorised cartels (OECD 1996a, p. 92).
- ⁴⁰ Cf. Section III above.
- ⁴¹ Central features are the provision of internal protection by subsidies, above all to agriculture, mining, steel-mills and shipyards, and the provision of external protection by trade barriers, mainly to textiles and clothing and to the food industry (Paqué, Soltwedel et al. 1993, p. 27).
- ⁴² It is also deemed to be unlikely that there will be much scope for strategically motivated support of high-technology industries in Germany in the future, as subsidies are shifted from West to East “to support senile industries left over from socialist times“ (Paqué, Soltwedel et al. 1993, p. 28).
- ⁴³ These industries attracted 55 percent of total subsidies in 1993 (up from 46 percent in 1984), while just managing to contribute a share of 2.5 percent (down from 4.8 percent) to the economy’s total value added (Koopmann, Kreienbaum, Borrmann 1997, p. 110).
- ⁴⁴ Externalities in this case refer to the inability of firms to capture the benefits of that part of their contribution to knowledge that spills over to other firms. In other words, the benefits do not carry a market price (Krugman, Obstfeld 1997, pp. 280-281).
- ⁴⁵ An inquiry into inter-industrial spillover links between five technology-intensive sectors (electrical engineering, precision and optical engineering, aerospace, mechanical engineering and vehicle manufacturing) in Germany shows a high level of spillover intensity in precision engineering and optics, whereas aerospace does not function as an important source of spillover effects for the other sectors investigated (Bönte 1994). This finding is consistent with results obtained by the monopolies commission in its investigation of the Daimler-Benz/MBB merger case in 1989 (Monopolkommission 1989). Even so, the aerospace industry receives a relatively big share of public R&D subsidies while the proportion of funds granted to the precision engineering and optical industry is minute in comparison (Pfähler, Bönte 1996, p. 75).

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- ⁴⁶ For an empirical analysis of the rivalry between Airbus, Boeing and McDonnell-Douglas (the other U.S. supplier which is to merge with Boeing) see especially Baldwin, Krugman (1988), Klepper (1994) and Neven, Seabright (1995).
- ⁴⁷ The semiconductor industry is widely regarded as a strategic industry in the sense that the production of semiconductors involves strong learning effects (and thus cost reductions) over time, and that semiconductors are used as high-technology inputs in virtually all branches of any modern economy.
- ⁴⁸ An important subsidy programme in this context is "Improving the Regional Economic Structure". Under this programme, cash grants are made available (including grants from the European Union's structural fund) for commercial investments in construction and equipment such as the construction of a computer chip factory by Siemens in Dresden.
- ⁴⁹ In the merger case of VEW/Sidéchar, however, a different attitude prevailed. Elimination of R&D competition was a reason for not allowing the merger (Monopolkommission 1986).
- ⁵⁰ The German interest, as perceived by the Ministry of Education, Science, Research and Technology (BMBF), includes: enhancement of the competitiveness of German industry; creation of jobs; increase in exports; development of technology-intensive and future-oriented production sectors in Germany; development of the German research community by involvement of foreign (R&D-intensive) firms, development of international cooperation in research, which in turn supports the transfer of know-how to Germany via the foreign enterprises concerned; encouragement of foreign firms to invest in German enterprises (taken from the BMBF Project Manual).
- ⁵¹ See, for instance, former Chancellor Helmut Schmidt in: *Die Zeit* of 4.4.1997: "Der Paragraphenwust tötet den Unternehmergeist".
- ⁵² Figures were cited by Rupert Scholz, chairman of the Council of Experts on "lean government" created in July 1995 by the federal government (*Neue Zürcher Zeitung* of 10.4.1997: "Die schwierige Verschlankung des Staates").
- ⁵³ Typical reasons put forward to justify regulation include: (1) market power, especially in the case of "natural" monopolies; (2) excessive transaction costs due to asymmetrical information, opportunistic behaviour, moral hazard or adverse selection; (3) the risk of ruinous competition (sunk costs) and (4) externalities (also including public goods) (Koopmann, Kreienbaum, Borrmann 1997, p. 98).
- ⁵⁴ It is useful in this context to distinguish between regulations that directly affect industries exposed to international competition, and indirect regulations that affect upstream (and sometimes also downstream) stages of production of goods or services. Direct regulatory intervention in the manufacturing industry typically comes in the shape of product or process standards (and related procedures) both of which are now increasingly being harmonised on an international basis. It has been shown that these "internal" measures are indeed less significant in Germany in terms of locational competitiveness than are "external" regulations in key input areas of industry. Cases in point to illustrate the impact of these indirect measures are the supply of energy (and particularly of electricity) and the provision of telecommunication services (Koopmann, Kreienbaum, Borrmann 1997, p. 99). Other important input markets which are closely regulated in Germany and strongly affect international competitiveness include the labour market, financial services and transportation.
- ⁵⁵ In this case, "Germany will hardly be better prepared to allow migrant workers in than the rest of the Community. ... In each EC member state including Germany a strong coalition of employers and employees in labour-intensive service industries successfully uses arguments such as "social dumping", "cultural homogeneity", and the danger of job losses to prevent import liberalisation for labour-intensive services" (Paqué, Soltwedel et al. 1993, p. 25).
- ⁵⁶ Defined as "all measures which serve to improve the export chances of goods and services" (Tuchtfeldt 1984, p.200).
- ⁵⁷ Under the new strategy, the Commission would invite industries and governments to identify the most stubborn obstacles in specific countries that are hindering European export and investment activities. With the help of a special Action Group, the Commission would then "select the most effective trade instruments at its disposal ... to remove those barriers" (European Union News, No. 9/96, p. 1). The strategy is backed up by the EU's Commercial Defence Instrument (CDI) of 1994. It permits the EU to take punitive action against "unfair" trade practices such as market exclusions. Unlike Section 301 of the U.S. Trade Act, however, the CDI expressly provides for sanctions only with prior

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- approval from the World Trade Organization (WTO) in cases covered by the WTO Agreement (EIU 1996, p. 84).
- ⁵⁸ If this indirectly results also from promotional measures for exports to third countries, these measures would be prohibited too under this provision.
- ⁵⁹ Exchange rate losses equal to the difference between a reference rate (DM 1.80) and the (lower) actual dollar exchange rate were to be compensated by the government without anything in return, i.e. payment of an insurance premium, as long as the actual exchange rate did not fall below DM 1.60.
- ⁶⁰ Germany's compliance in the exchange rate issue also cleared the way for agreement between the European Community and the United States on the entire question of subsidising civil wide-bodied aircraft construction. In April 1992, it was agreed to limit direct state aid to 33 percent of development costs and indirect aid to 3 percent of the industry's sales or 4 percent of sales in the case of individual companies.
- ⁶¹ Even though national quotas were largely abandoned in 1994 after completing the internal market, they are still permitted in exceptional cases (Glismann 1996, p. 36). With the removal of internal border controls, effective implementation of these quotas has, however, become more difficult.
- ⁶² The share is 4 percent in Germany, 2 percent on average for the EU, and is just 0.56 percent in the United Kingdom, for instance (Carl 1994, p. 173; Gramlich 1995, p. 795).
- ⁶³ During the 1990s, for instance, General Electric (GE) bid for several steam power projects, a process which usually costs between \$500,000 and \$1 million per bid. The winners were either Siemens or the Swiss-Swedish group Asea Brown Boveri. Both have their main steam turbine manufacturing facilities in Germany. General Electric pointed out that e.g. short-term deadlines for the invitations for tenders put companies with insider knowledge - i.e. national companies - at an advantage. In the case of the Lippendorf power station in eastern Germany, GE took its claim through two courts without success. The US corporation Westinghouse feels similarly cheated, for after its offer for the production of electricity for Cottbus had already been accepted, the Land of Brandenburg decided to put out a new invitation for tenders, but with altered conditions (Koopmann, Kreienbaum, Borrmann 1997, pp. 93-95).
- ⁶⁴ This is probably one of the reasons why workers in Germany have a relatively low propensity to switch between occupations, to retrain or to move to a different region.
- ⁶⁵ A large part of the cost of reunification, for instance, is being borne by social security institutions which pass it onto labour costs.
- ⁶⁶ As a result, equity capital tends to be replaced by loan capital, and fewer risky investments are carried out.
- ⁶⁷ A third GCIT is being built in Jakarta (Nachrichten für Außenhandel, 1.4.1997: "Deutsches Haus entsteht in Jakarta").
- ⁶⁸ For the specific case of (South-East) Asia see Starbatty (1996) and, with special reference to small and medium-sized enterprises, Borrmann et al. (1996).
- ⁶⁹ Better information could also increase the use of the export insurance instrument (Hermes-Exportversicherung) by SMEs of which at present mainly large firms take advantage (BDI 1997, p. 38).
- ⁷⁰ As the overall size of the transactions concerned is relatively small, the impact of tying or not tying on the donor economy is, in fact, hardly discernible, even though almost 50 percent of bilateral aid provided by OECD donor countries is tied to procurement in the individual donor country itself or in a group of selected countries. The tying of development aid is also generally considered as detrimental to the efficiency of development assistance. It can be explained as the outcome of a political decision-making process in the donor countries involving politicians, bureaucrats, voters and opposing lobby groups representing commercial interests on the one hand and developmental interests on the other hand. For a systematic analysis of aid tying from a public-choice perspective, cf. Michaelowa 1996.
- ⁷¹ Relocations to low-wage countries also seem to be a minor factor for labour-market problems of unskilled and low-wage workers, whereas rationalisation is much more important (Burger, Jungnickel 1996, p. 115).
- ⁷² For a more detailed discussion, cf. Härtel, Jungnickel et al. 1998.
- ⁷³ For a discussion of investment incentives, cf. Jungnickel, Koopmann 1997.

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