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An Analysis of the Structural Development of the German Economy

When the five major German economic research institutes were commissioned by the Federal Ministry of Economic Affairs three years ago to produce, each independently of the others, a "comprehensive economic analysis of the structural development of the economic sectors" since 1960 they were given a task which was surely without parallel in the world. Their reports have been available since the beginning of this year. The structural report of the HWWA-Institut für Wirtschaftsforschung-Hamburg alone runs to four volumes – one volume of text, two containing supportive evidence, and a supplementary volume¹. Some of its salient points are presented in the following summary.

An initial consideration of the overall development of the economy shows that economic growth slowed in the *sixties* compared with the *fifties*. Not only did the scarcity of labour limit the scope for expansion once full employment had been attained but the labour productivity rose more slowly. This could at first still be interpreted as normalization. In the *seventies* the advance in productivity however slowed further. Moreover, the reduced scope for growth was no longer fully utilized; the rise of the national product slowed more than the rise of productivity, so that more workers became redundant than were newly engaged.

Turning now from the overall development of the economy to its changing structure, the pattern of development in the sixties and even more so in the seventies is seen to be one that is typical of mature highly-industrialized countries (Table 1). The primary sector constantly lost weight. The secondary sector, which had been the most dynamic sector during the phase of industrialization, held its share of the total production in the sixties but lost four percentage points in the seventies. The share of the tertiary sector increased continuously, reaching 50 % at the end of the seventies.

The same pattern emerges from a review of the 57 individual sectors for which data on the development of production are available (Table 2). If they are grouped according to above-average, average and below-average production growth, most of those of the tertiary sector fall into the top group, most of those of the

secondary sector into the intermediate group and all those of the primary sector into the bottom group. Quite a few sectors however moved in the course of time from one group into another. Only three individual sectors – the state, insurance and miscellaneous services – were always in the top group and no more than seven – leather production, leather processing, the iron and steel producing industry, agriculture, fisheries, coal mining, and other mining industries – stayed all the time in the bottom group. The most important changes between the sixties and the seventies occurred in the secondary sector: there the share of the expanding sectors declined, and the share of the contracting sectors increased.

The contraction of the secondary sector during the seventies accounts for the heavy fall of employment (Table 3). The number of redundancies in the primary sector on the other hand dropped in the seventies; in contrast to the sixties they were more than offset by the creation of jobs in the tertiary sector.

Determinants of Structural Change

Four groups of determinants may be distinguished in elucidation of the overall development of the economy and the structural changes:

- In attempts to elucidate changes primarily from the supply side the long-term development of the economy

¹ Analyse der strukturellen Entwicklung der deutschen Wirtschaft – Strukturbericht 1980. Verlag Weltarchiv GmbH, Hamburg 1981

Table 1
Development of the Primary, Secondary and Tertiary Sector Shares of the Gross Value Added of All Economic Sectors^a
 (in %)

	1960	1964	1969	1973	1979
Primary Sector	8.5	6.6	5.1	4.2	3.2
Secondary Sector	50.7	51.4	51.0	49.2	47.1
Tertiary Sector	40.8	42.0	43.9	46.6	49.7
All Economic Sectors	100.0	100.0	100.0	100.0	100.0

^aPrimary sector: Agriculture and forestry, fisheries, mining; Secondary sector: Goods producing industries excl. mining; Tertiary sector: Trade and transport, services, state, private households, non-profit-making private organizations.

Source: Federal Statistical Office.

is assumed to depend on its endowment with production factors and natural resources as well as on technological progress and the use made of it. One of the reasons for coordination problems is held to be a discrepancy between the demand for labour, capital goods, raw materials, energy and environment required as a result of changes in production methods, on the one hand, and the actually available supply, on the other.

□ In hypotheses with a demand bias the spending behaviour of the private households and the state is regarded as the essential determinant as it influences the production of the private and public goods the provision of which is the ultimate purpose of economic activity. According to demand-oriented hypotheses their spending behaviour also determines the demand for capital goods by the enterprises.

□ As the production in the Federal Republic is aimed at foreign as well as internal demand and as the internal demand is covered in part by foreign supplies, it is also being suggested that the overall development of the economy and structural changes inside it are influenced above all by the economic developments in the world at large, by the place of the German economy in the international division of labour and by cost and price differentials between the internal market and the outside world.

□ Finally, mention should be made of approaches focusing on government decisions. Almost all activities by the state prompt structural changes. This is true not only of the demand of the state for goods and the provision of public services but of policy intervention at the overall economic and the sectoral levels. (Only the first three of these approaches will be followed up in the following.)

As a matter of fact the overall economic and sectoral developments cannot be ascribed to one single cause,

the less so as supply and demand factors, external economic conditions and economic policy decisions are in part interdependent.

Supply Factors

The relative scarcity of the production factors labour and capital altered thoroughly after 1973. In the sixties labour had been a scarcer production factor than capital. Since 1973 the employment opportunities have been limited to an increasing extent by the amount of capital invested in productive plants. The growth of the capital stock slowed from 6.2 % a year in 1960-1973 to 4.1 % in 1973-1979. Although the capital intensification decelerated at the same time – i.e., the amount of invested capital per job was raised less than had been the case earlier – the number of available jobs fell off so much that it resulted in a deficit of job opportunities relative to the supply of labour. In 1979, an upswing year, normal use was made again of the plant capacities but not of the manpower potential.

The continuing overall deficiency of job opportunities has given rise to structural problems in the labour market which make it more difficult to overcome the underemployment. Most severely hit by rising unemployment were the so-called problem groups, especially the older workers and those with a reduced ability to work.

The employment problems ensuing from the changes in the production structure were in comparison of less importance. Some of them have indeed become less acute: fewer people than previously depend by virtue of their vocational training on the fortunes of individual sectors because the vocational ties to particular industries have been loosened. At the same time the skill level of the labour force has been raised. The demand for skilled personnel has also greatly increased, however, and workers with inferior qualifications have greater difficulty in finding jobs, not least because of the structural changes in external economic relations.

With an overall deficit of job opportunities concurring with a high wage level the solution of structural problems in the labour market requires greater flexibility of wage structures than was needed in the sixties when labour was scarce and the wage level relatively low. The intersectoral wage relations have changed accordingly: the average wages showed a greater sectoral differentiation in the seventies than they had done in the sixties. The intrasectoral convergence of wage rates according to qualifications and sex of the personnel, on the other hand, continued in the seventies. A

Table 2
Arrangement of Economic Sectors according to Average Annual Growth of Gross Value Added^a between 1960 and 1977

Economic Sector	Nominal Growth	Real Growth ^b	Relative Deviation from Overall Economic Growth (in %)	Share of Total Gross Value Added (in %)	
	(in %)	(in %)	(in %)	1960	1977
GROUP A^c					
Miscellaneous services	13.1	8.2	4.2	3.5	7.0
Office machines, data processing apparatus and equipment	13.0	8.1	4.1	0.3	0.6
Medical and veterinary services	12.7	7.8	3.8	1.2	2.2
Aircraft and aerospace industry	12.5	7.6	3.7	0.1	0.1
Credit institutes	12.3	7.4	3.5	1.8	3.3
Manufacture of plastics goods	12.0	7.1	3.2	0.4	0.7
Insurances	11.9	7.0	3.1	0.6	1.0
Non-profit making private organizations	11.7	6.8	2.9	0.9	1.5
Central, regional and local authorities	11.6	6.7	2.8	6.8	10.9
Telecommunications (German Federal Mail)	11.3	6.4	2.5	1.5	2.3
Road vehicles, vehicle repair, etc.	10.9	6.1	2.1	2.6	3.8
Precision engineering, optical goods, clocks and watches	10.8	6.0	2.1	0.6	0.8
GROUP B					
Social security	10.6	5.8	1.9	0.4	0.6
Electrotechnical goods, repair of dom. appliances	10.2	5.4	1.5	3.3	4.3
Letting of accommodation	10.2	5.4	1.5	4.1	5.3
Mineral oil processing	10.1	5.3	1.4	1.3	1.7
Woodworking trades	9.8	5.1	1.2	1.0	1.3
Transport, n.e.s.	9.8	5.0	1.2	1.9	2.3
Steel and light-metal construction, rail vehicle construction	9.4	4.7	0.8	0.7	0.8
Electricity, gas, water, district heating	9.3	4.5	0.6	2.4	2.7
Mechanical engineering	9.2	4.5	0.6	3.8	4.2
Fitting-out trade	9.2	4.4	0.6	2.0	2.2
Science, education, arts, publishing	8.9	4.1	0.3	1.0	1.1
Printing, reproduction	8.7	4.0	0.1	0.9	0.9
Chemical industry, fusion and fission materials	8.3	3.5	-0.3	3.7	3.5
Rubber processing	8.2	3.5	-0.3	0.5	0.5
Hotel and catering trade	8.2	3.5	-0.3	1.4	1.4
Iron, sheet and metal products manufacture	8.1	3.4	-0.4	1.4	1.3
Musical instruments, toys, fountain pens, etc.	8.0	3.3	-0.5	0.3	0.3
Retail trade	7.9	3.2	-0.6	5.8	5.2
Glass production and manufacture	7.9	3.2	-0.6	0.4	0.3
Paper and cardboard processing	7.8	3.1	-0.7	0.5	0.5
Timber processing	7.5	2.8	-0.9	0.3	0.3
Building trade (excl. fitting-out trade)	6.9	2.2	-1.5	5.6	4.3
Shipbuilding	7.0	2.3	-1.5	0.3	0.2
Food industry (excl. beverages)	6.5	1.9	-1.8	3.2	2.3
Steel shaping, drawing, cold rolling, etc.	6.5	1.8	-1.9	1.5	1.1
Production and processing of stones and earths	6.3	1.7	-2.0	1.6	1.1
GROUP C					
Non-ferrous metal production and processing	6.3	1.7	-2.1	0.5	0.4
Wholesale and commission trade	6.2	1.6	-2.1	6.2	4.3
Clothing trade	6.1	1.5	-2.2	1.1	0.8
Fine ceramics	6.0	1.4	-2.3	0.3	0.2
Foundry industry	6.1	1.4	-2.3	0.7	0.4
Tobacco manufacture	5.9	1.3	-2.4	1.5	1.0
Production of beverages	5.8	1.2	-2.5	1.6	1.1
Shipping, waterways, ports	5.7	1.1	-2.6	0.6	0.4
Cellulose, pulp, paper, cardboard production	5.2	0.6	-3.1	0.5	0.3
Forestry, fisheries, horticulture and animal husbandry	5.1	0.5	-3.2	0.7	0.4
Agriculture	3.8	-0.8	-4.4	5.1	2.4
Textile industry	3.8	-0.7	-4.4	2.3	1.1
Leather processing	3.7	-0.9	-4.5	0.6	0.3
Iron producing industry	3.6	-0.9	-4.6	2.8	1.3
Railways	2.6	-1.8	-5.4	2.2	0.8
Coal mining	2.2	-2.2	-5.8	2.3	0.8
Leather production	-0.1	-4.5	-8.0	0.1	0.0
Private households (domestic services)	-0.5	-4.9	-8.4	0.6	0.1
Other mining	-1.6	-5.9	-9.4	0.5	0.1

^aUnadjusted gross value added; ^bGrowth deflated by the price index for overall gross value added; ^cGroups A and C comprise the sectors the growth of which was more than 2 percentage points above (A) or below (C) the annual overall growth rate of the economy between 1960 and 1977; in Group B are those with growth rates inside these 2% limits.

S o u r c e : Federal Statistical Office.

REPORT

Table 3
Changes in the Number of Persons Employed in the Economic Sectors between 1960 and 1978
(in 1,000)

	1960/64	1964/69	1969/73	1973/78
Agriculture, forestry, fisheries	-579	-607	-441	-346
Goods producing industries	485	-267	46	-1,486
Energy and water supply, mining	-97	-123	-31	-29
Electricity, gas, water, district heating	21	9	7	-2
Mining	-118	-132	-38	-27
Coal mining	-103	-119	-34	-22
Other mining	-15	-13	-4	-5
Manufacturing industry	261	-2	18	-1,033
Chemical industry, fusion and fission materials	43	53	10	-23
Mineral oil processing	0	1	8	-19
Manufacture of plastics goods	31	42	35	-9
Rubber processing	8	12	0	-20
Production and processing of stones and earths	2	-45	15	-57
Fine ceramics	-5	-8	-3	-10
Glass production and manufacture	-2	7	0	-15
Iron producing industry	-1	-88	-37	-46
Non-ferrous metal production and processing	0	12	-10	-15
Foundry industry	-12	-21	-1	-26
Steel shaping, drawing, cold rolling, etc.	2	-10	-3	-17
Steel and light-metal construction, rail vehicle construction	-8	-31	1	-13
Mechanical engineering	35	85	42	-118
Office machines, data processing apparatus and equipment	12	23	9	-28
Road vehicles, vehicle repair, etc.	158	88	79	14
Shipbuilding	-16	-2	-6	-8
Aircraft and aerospace industry	14	4	4	7
Electrotechnical goods, repair of dom. appliances	103	83	99	-134
Precision engineering, optical goods, clocks and watches	5	13	15	11
Iron, sheet and metal products manufacture	-3	-3	4	-54
Musical instruments, toys, fountain pens, etc.	0	4	-9	-3
Timber processing	-3	-10	-6	-12
Woodworking trades	-44	-43	-13	-34
Cellulose, pulp, paper, cardboard production	-3	-4	-13	-13
Paper and cardboard processing	6	7	4	-30
Printing, reproduction	14	13	3	-31
Leather production	-4	-17	-5	-3
Leather processing	-12	-21	-44	-34
Textile industry	-91	-57	-88	-129
Clothing industry	16	-52	-66	-111
Food industry	41	-23	1	-45
Tobacco manufacture	-25	-14	-7	-8
Building industry	321	-142	59	-424
Building industry excl. fitting-out trade	264	-173	-2	-391
Fitting-out trade	57	31	61	-33
Trade and transport	62	-95	180	-300
Trade	45	-14	58	-198
Transport, telecommunications	17	-81	122	-102
Railways	-26	-89	34	-64
Other transport	4	0	38	-19
Telecommunications	39	8	50	-19
Service enterprises	223	291	144	263
Credit and insurance institutes	83	107	105	20
Credit institutes	52	72	84	26
Insurances	31	35	21	-6
Other services, letting of accommodation	140	184	39	243
All enterprises together	191	-678	-71	-1,869
Production enterprises	108	-785	-176	-1,889
State	442	319	469	318
Federal, regional and local authorities	430	304	447	299
Social security	12	15	22	19
Private households, non-profit-making private organizations	-95	-19	10	84
Private households	-135	-104	-	-
Non-profit-making private organizations	40	85	-	-
All economic sectors	538	-378	408	-1,467

Source: Federal Statistical Office.

connection between this development and the above-average unemployment of employees with low qualifications and, especially, women can be assumed to exist but could not be clearly proved by reference to available empirical data.

Similarly it is not possible to state unequivocally to what extent the slowed growth of the capital stock and thus the deficit of job opportunities was caused by the increase in the wage level as the investment propensity was also impaired by the stabilisation crisis, the world-wide recession and the sharp appreciation of the D-Mark. It is however to be noted that in the fifties, when the real wages rose significantly less than the labour productivity, 4,500,000 jobs were newly created. In the sixties the scarcity of labour at first enabled the real wages to move ahead of productivity. The acceleration of the wage rise in the seventies was however followed by an employment slump. It was only when the real wages lagged clearly behind the rise of productivity that the total investment activity gained force again.

Slower Rise of Productivity

The slowing growth of the capital stock was also a factor in reducing the annual rate of labour productivity increase from 4.5 % in 1960-1973 to a good 3 %. It does not, however, by itself explain the slowing of the productivity advance for the loss of jobs of below-average productivity and the need – rendered more urgent by the appreciation of the D-Mark – to specialize in competitive kinds of production might, in the absence of other factors, have been expected to further rather than to retard advances in productivity. The reserve of utilizable technological innovations has, however, presumably become smaller since the productivity arrears compared with the USA have been largely made good. Further productivity gains can therefore no longer be derived to the same extent from technology imports but require a greater measure of innovations by the enterprises themselves. The ratio of R & D expenditure to the national product, which doubled in the sixties, has however been stagnating since the early seventies, and the tightening supplies and rising cost of energy and raw materials and lessening flexibility of goods and factor markets have also had the effect of lowering productivity.

In two-thirds of all individual sectors the rise of productivity has slowed down. It has grown faster in some sections of the tertiary sector and in manufacturing industry, especially in the industries producing non-ferrous metals and office and data processing machines.

There is no simple correlation between changes in sectoral production and sectoral productivity advances. Sectors with high or low productivity growth are to be found in the group of expanding sectors as well as in that of contracting sectors. Competition within and between sectors and with foreign countries compels the enterprises to avail themselves of opportunities to raise productivity but also ensures that the consequent cost savings are by and large passed on through the selling prices, with the effect that sectoral differences in regard to productivity advances are not reflected by the development of value added. Besides, the sectoral demand depends not only on price movements but, for instance, on the supplies of new products.

The intensity of research activities proved an important sectoral supply factor. Sectors with above-average R & D activity (chemicals, mechanical engineering, motor vehicles and electrical engineering, precision engineering and optics, and plastics manufacture) were not only distinguished by above-average growth of production but are among the sectors in an internationally strong competitive position. Their R & D activities are however probably aimed less at process innovations for their own enterprises than at product innovations for others.

There is no evidence for the wide-spread belief that more labour is made redundant in sectors with above-average gains in productivity and that small advances in productivity are good for employment. From an overall economic point of view advancing productivity is an important determinant of growth because it has an impact on the development of real incomes and thus of demand. The employment problems have arisen irrespective of the size of the productivity gains as a result of insufficient economic momentum and the adjustment problems which emerged in the course of the structural changes.

The higher cost of energy following the 1973 oil crisis brought about striking changes among the supply factors. How and to what extent it has led to frictional adjustment problems, however, is not quite clear. Sectoral energy costs have certainly become more important for the sectoral cost level, but the especially disadvantaged sectors are making increasing efforts to save energy. Even before 1973, in a phase of relatively falling energy prices, the energy intensity had been declining as far as the enterprises were concerned whereas the demand for energy for transport and from private households had been rising sharply. The considerable reduction in the use of energy in the steel industry – the most energy-intensive sector – after

1973 shows that there are opportunities for adjustments and that use is made of them.

The frictions resulted probably from uncertainty about future decisions on energy policy, on the one hand, and the aggravation of the international distribution, inflation and balance of payments problems, on the other, rather than from the big increase in the cost of oil and other sources of energy.

Demand Factors

The lessening economic momentum since 1973 cannot be explained by signs of a general saturation of the demand for consumer goods. The slowing of the growth of consumption is attributable to the deceleration of the income expansion and not to changes in the savings ratio. While the latter had shown a rising trend in the sixties which could have been regarded as a sign of increasing general saturation, this trend did not continue in the seventies; this is still true if the housebuilding investments by private households are included among the spending on consumption.

There is no evidence to suggest that frictional adjustment problems resulting from changes in the structure of consumption have had a damping effect on growth: the structural change certainly received quite important impulses from private consumption but the transformation of the consumption structure proceeded at a fairly constant rate. The pace of change actually slowed in the seventies. It is therefore unlikely to have made excessive demands on the adaptability of the production structure.

The consumption structure changed in the main because rising incomes and the possession of more durable consumer goods enabled the private households to turn to new spending areas. The share of basic requirements in their spending declined between 1960 and 1979 from 62 to 54 % while goods for private transport, leisure-time activities, holidays, home appurtenances and entertainment gained in importance. A growing proportion of private incomes was spent on energy – before 1973, when the energy prices declined in relation to others, because much more energy was used and after 1973 because the energy prices rose above the average. The change of the consumption structure favoured the tertiary sector at the expense of the primary sector, and imports increased to the detriment of internal production.

Lack of public sector demand cannot be held responsible for the slowing of the economic momentum either. At least it was not its primary cause. Public demand too, rose more slowly but, like in the case of

private consumption, this was not the cause but the consequence of the slower expansion of the economy which prompted a slower rise of state revenues. Sooner or later there had to be similar changes on the expenditure side, even if considerably larger deficits were accepted.

As there is no evidence of a primary shortfall of demand from either the private households or the state but the slower rise of demand has to be considered a consequence of the weakening economic momentum, it cannot be regarded as the cause of the low investment activity although the investment level certainly depends in great measure on the trend of sales. The crucial factor appears to have been that the profit chances were deemed to be inadequate in relation to the risks attending investments.

The interest of investors has shifted away from buildings towards plant equipment. Not the least of the causes of this development was the strategy of the enterprises to replace long-lasting investment goods by short-lived ones in order to improve their profitability. Among equipment investments, machinery lost in importance compared with motor vehicles, office machines and electro-technical products. The foreign suppliers were able to increase their share of the investment goods market considerably, just as happened in the field of consumer goods.

Extraneous Factors

The growth of German exports slowed parallel to the reduced rate of world trade volume expansion from 8 % annually in 1960-1973 to 4.5 % in 1973-1979. This development affected the production and investment activity not only of the exporting enterprises but of their suppliers. In view of the great importance of the export sector for the German economy it might be assumed that the growth and employment problems were attributable chiefly to the low momentum of economic activity abroad as reflected by the development of world trade. This, however, would be a too one-sided point of view. The economic trend in most of the industrialized western countries was similar to that in the Federal Republic. This parallelity suggests the existence of common or similar causes for the weakening economic momentum in the Federal Republic and outside. With flexible exchange rates in particular it should be perfectly possible for one country to achieve relatively high growth rates even when the expansion of import demand in the world at large slackens, provided that the supply side conditions for investments develop more favourably than elsewhere. Japan and, especially in the

fifties, the Federal Republic are examples of countries with above-average economic growth and import as well as export expansion overproportional to world trade. In 1978/79 the Federal Republic also achieved greater growth than her foreign trade partners, which shows that an individual country is quite capable of cutting adrift from a less favourable economic trend in the world.

The German economy benefited from the fact that the industries specializing in exports produce goods which are in above-average demand in the world at large. The sectors with a high human capital-intensity, i.e. those employing a high proportion of skilled workers, are especially competitive in the international field. The sectors which are less competitive in internal and external markets, on the other hand, are known to employ more unskilled or semi-skilled labour, simple technologies and a relatively large amount of physical capital. In such circumstances foreign suppliers find it easier to replace the domestic producers; consequently, production costs have in this case a much greater bearing on the competitiveness. The costs of energy and pollution control, on the other hand, have so far had no clear impact on the competitive situation, probably because in the competing industrialized countries they show a similar sectoral weighting.

The Federal Republic thus owes its export successes not least to its ability to make "intelligent" technology-intensive products which are normally produced in sectors with a high human capital-intensity. Since the mid-sixties there has been little change, however, in the composition of German exports between top-technology products, advanced-technology products and other products. The imports from Japan and the USA, on the other hand, consist to a growing extent of top- and advanced-technology products.

None of the highly competitive sectors have managed to improve their competitive position. Some traditional exporting industries – shipbuilding and the automobile industry – have actually witnessed a considerable deterioration of their position. This does not mean that the German economy as a whole has become less competitive, for some sectors have improved their formerly weak competitive position. This tendency towards a convergence of the competitive positions is connected with the intensification of the trade exchanges with other industrialized countries. These do not differ significantly from the Federal Republic in regard to the factors determining competitiveness, so that product differentiation in the same industries tends to increase exports as well as

imports. The structural change ensuing from this intensification of intra-industry trade exchanges raises relatively few problems because labour is made redundant in the very industries in which new jobs are created, often by the same enterprises and for the most part coincidentally.

In the trade with developing countries the situation is different. Although these countries provide as yet only 10 % of the German imports of manufactured goods, the trade with them involves a greater need for adjustments because the imports of manufactured goods from developing countries are not matched by exports to them by the same industries. Labour displaced in the import-affected sectors cannot be employed without difficulty in sectors benefiting from exports to the developing countries because the workers concerned often do not possess the, sometimes superior, qualifications required in these sectors. The developing countries have been able to gain market shares especially in productions for which unskilled labour is used in combination with already widely available technologies.

As the D-Mark appreciated by a substantially greater margin than corresponded to the inflation differential compared with the outside world, the German economy had to operate in the seventies at a relatively very much higher cost and price level than its foreign competitors than had been the case in the sixties. Nevertheless the German exporters managed until 1978 to raise their world market share compared with the other industrialized western countries, and the German trade surplus also continued to increase in spite of stronger import pressure. Evidently the German enterprises were able to offset the above-average rise of their costs and prices by other factors with a bearing on competition.

At present it cannot yet be ascertained to what extent the heavy fall of the foreign trade surpluses in the years 1979/1980 was not due solely to the higher cost of oil and to a cyclical trend experience different from that of other countries but also to weakening competitiveness. The fact that the other industrialized countries have brought the range of goods which they offer more in line with that of the Federal Republic, may suggest that competitive strength which rests on availability advantages cannot be sustained very long in the presence of wide cost differentials. The substantial depreciation of the D-Mark in real terms since the spring of 1979 bears out this supposition. It has in the meantime had the effect of reducing part of the cost differentials.