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Changes in Employment in Six Developed Countries 15343

2.1 Concepts and Methods

Analysis of the effects of North-South trade on employment in developed market industrial economies is, not a simple task. Various, often contradictory, arguments about this trade can be found in the economic literature. Sometimes it is often difficult to judge, if they show key factors or if they blow up marginal influences. In order to assess the importance of factors influencing employment in the period of change and restructuring of the world industry, it is, inter alia, necessary to quantify those factors which can be measured.

Calculations of the impact of various factors influencing employment were therefore undertaken for six developed industrial countries, i.e. for the Federal Republic of Germany, France, Italy, Japan, the United Kingdom and the United States of America. These six countries are the hard core of the industrialized world. In the late seventies problems of unemployment, inflation and of the retardation of growth were more acute in some countries and less acute in other countries.

The analysis used the input-output model. This approach allows to decompose changes in employment into several factors. Technical aspects of the investigation will not be explained, the method used is some kind of complicated index number analysis. It was used in the past in slightly different variants, by many authors for a number of countries. To understand the results it is necessary to know the logic of the investigation and explain the terminology used.

Input-output tables are regularly compiled by national statistical offices. Their compilation is costly and time-consuming, they are therefore not compiled every year, and are published with a delay of a few years after the reference year. In the analysis, tables referring mainly to 1975 and 1980 were used. The later tables were also used for an evaluation of the foreign trade effects up to 1983. Original tables published by the national statistical offices are valued at current prices of the two reference years. Their differences reflect both changes in volumes and changes in relative prices. In order to distinguish between price and volume effects, the more

recent tables (mainly for 1980) were revalued into prices of the earlier year. The result were pairs of tables for each of the six countries at constant prices. They reflect only changes in volumes, and allow to analyse the impact of the "real" changes in economic structure on the employment level and structure.

In an input-output table a country's economy is divided into a number of industries, producing various goods or services. Each industry has in the table its own and its own column. Data in the rows show the allocation (distribution) of industry's output among other industries - which use it as input in their production and to final uses, i.e. for consumption (private and public), accumulation (gross capital formation and changes in stocks) and exports. Imports can be either deducted from exports (as in the tables used here) or separated from domestic production and given in a separate transactions table. Industry's column records industry's purchases of goods and services from other industries, and at the bottom, industry's value added (wages and salaries, depreciation, profits and - depending on the valuation used - all or only some indirect taxes. Input-output table can also be extended by other data. For the analysis of employment changes, the input-output tables for the six countries were extended by data on the number of economically active persons by industries. (For the United states, only data on the number of employees increased. Information on the number of self-employed was not available.)

Why do statistical offices regularly undertake such laborious and costly compilation, of input-output tables? The tables are very useful in economic analysis because they allow to trace the indirect, induced effects of certain changes through the whole economy. This can be explained by the following example, which also helps to understand the framework of the input-output table. All industrial countries have "non-metallic" industries producing glass, ceramics, and various construction materials. A part of the output is sold to other industries, (construction, and some manufacturing branches). Some products are also purchased by private households (china or glass) and by the government, some are delivered directly for investment. China, glass and some construction materials are also both exported and imported. In the relevant row of the input-output table it is possible to find exact information about these flows of goods, about this "from whom to whom". The

column of the "non-metallic" industry shows its input structure. The industry is buying raw materials from quarries, consumes large amounts of energy, needs specific chemical products, and requires also transportation and trade services. The industry's column is another picture of the "from whom to whom". In addition, in the column there is also information about wages and salaries, about depreciation of fixed capital, about gross (before tax) profits and about some or all indirect taxes and on subsidies. And the table can also show how many persons were working in the industry in the reference year.

This network allows to trace, inter alia, the cumulative, i.e. the direct and indirect labour requirements of certain production. Imagine that a certain volume of the output of the non-metallic industry is exported. How many people are employed by these exports not only in the industry, but in the whole economy. How many jobs depend on exports. A comparison of the number of economically active persons and of the total output of the non-metallic industry (i.e. the productivity level), allows to calculate the direct labour requirements of exports. Suppose that 20 per cent of the output were exported. Then one-fifth of the economically active persons work for exports. But the industry buys also goods and services from other industries. A certain number of people work for the deliveries of in energy, some are employed in quarries, some in chemistry, some in trade, some in transportation, etc. They all work indirectly for exports of ceramics, glass or other non-metallic products. These "indirectly" employed therefore have to be added to those who participate "directly" in the manufacture of exported goods. But the chain of interdependency does not stop here. The chemical industry buys raw materials from other industries, consumes energy and also needs transportation and trade services. A part of the persons engaged in these activities have to be added to the indirect labour requirements of the non-metallic exports. The chain of such calculations can be prolonged and prolonged. The additional number of "indirect" labour gets smaller in each step and approaches a certain final value of cumulative labourrequirement for exports. It is impossible to carry out such calculation by hand. But a modern computer can do such operations in a very short time. The input-output table thus allows to trace the interdependence between employment on one hand, and domestic demand, foreign trade, and domestic production on the other hand.

With two comparable input-output tables, it is then possible to understand the interpendence of changes in employment, and domestic demand and foreign trade on the other. Such analysis has a specific logical structure and uses specific terminology, the understanding of which is very important. The focus of interest are changes in the number of economically active persons, both in its total level as well as in its sectoral composition. These changes can be allocated to several factors. Two important and interrelated factors which have to be considered first are growth of the economy and the increase in labour productivity. Economic growth creates jobs. It is usually measured (in "real terms") by the value of the gross domestic product at constant prices (i.e. prices of a certain base year). The demand for labour follows the growth of the economy. If there were no other factors influencing employment, i.e. should the economy in all its parts follow the overall development path and should it every part change at the same rate, the number of economically active persons would grow at the same rate as the gross domestic product. But this is never the case. The increase in total number of economically active persons and the increase in the value of the gross domestic product differ for various reasons. One important cause of this difference is the increase in the productivity of labour, which is closely interrelated with the overall growth of the economy. It is difficult to say exactly what is the cause and what is the result. The obvious consequence of the joint march output and productivity growth, is that demand for new jobs grows much more slowly than the gross domestic products. Moreover, labour productivity does not follow the same path in all industries. This differential productivity growth leads to different "labour saving" effects in particular industries. Also the output of particular industries does not follow the growth path of the gross domestic product. Deviations from this path can be explained in the input-output system by various kinds of structural change which are interdependent. In this study on employment for the six developed countries, the structural change is decomposed into three broad structural factors, which are labelled "technology", "domestic final demand" and "foreign trade". They reflect three different markets on which the output is sold. The notion of "technology" in the input-output analysis includes changes in the demand for intermediate goods, i.e. for raw materials, energy and semi-finished products. The pattern of this demand, i.e. the "production technology", changes for various reasons. One is the substitution of certain inputs for other inputs; e.g. coal can be substituted by oil or

vice versa. Another is the change in the proportion in which various inputs are used. It may be possible to save energy by technical improvements. Another reason can be the introduction of a completely new technology, or of a new product. And last but not least, a change in the composition of the industry's output due to changes in demand also changes industry's input structure. The reasons for such shifts are partly technical (for example product or technology innovations) partly they are economic (like changes in price relations or in consumers' preferences). In the input-output system, such shifts are generally called "changes in technology". This concept is thus very broad.

The meaning of "structural change" in domestic final demand is easily understandable. Domestic final demand includes consumption (by private households or by public bodies) and accumulation (investment, both private and public, and also the rather small changes in stocks). The relations between these two broad components of demand are not stable over time but fluctuate during the business cycle also the commodity composition of these final demand components is not stable in time. Demand of private households shifts from food to durables (like private cars, TV sets, record players). The share of construction and machines in investment outlays depends on the orientation of the investment. Shifts in domestic final demand influence the output of particular industries and, consequently, create or destroy jobs. Some industries produce more than in the past, some produce less (even if the whole economy grows).

The last, but not least, source of shifts in the structure of output and in employment is foreign trade. The developed market economies export and import large quantities of goods. The composition of imports and exports is not identical. It changes over time according to the changes in the competitiveness of the country. Countries can loosen again market shares abroad or within their economies. The changes in the commodity composition of both exports and imports thus influence output and employment in individual industries. One aspect of changes in foreign trade are shifts in the regional compostion. Such shifts occur among developed countries, which are linked by a dense network of foreign trade. But they also occur in North-South trade.

A brief summary of the logic of the analysis for the six developed countries is as follows: The total number of economically active persons and their sectoral composition changed in the second half of the seventies. These changes are the consequence of economic growth, of productivity growth, of changes in the "technology", of shifts in the structure of domestic final demand, and of structural changes in foreign trade (among which the North-South trade deserves particular attention). The input-output analysis quantifies the relative importance of these factors.

2.2 Germany

2.2.1 The German Economy between 1975 and 1983

Indicators of German economic development between 1970-1983 are given in Table 2.2.1. This table contains annual data from 1975 onwards, and also, average values for the following three sub-periods: 1970 - 1975, 1975 - 1980, 1980 - 1983. The middle sub-period, i.e. the second half of the seventies, (it is the period for which factors of change in employment will be investigated) was the relatively best one. The gross domestic product (in real terms) was growing by 3.5 percent annually, this was better than the 2.4 percent in the preceeding five years and much better than the stagnation in the early eighties. The average annual rate of price increase of 3.9 percent was lower both than before (6.2 percent) and after (5.0 percent). But the labour market deteriorated steadily. The average rate of unemployment in the first half of the seventies was 1.6 percent only, it doubled in the second half of the sixties (3.8 percent). In the first three years of the eighties the unemployment rate was 5.9 percent.

The average values for the three subperiods, i.e. for the early and late seventies and for the early eighties do not deficit exactly the turbulent development of the German economy during those years. In particular they say little about the years 1975 and 1980, i.e. about the two years for which the structure of the German economy is depicted in input-output statistics.

1975 was a year of the lower turning point in the economic cycle. A downswing of the Germany economy began in the middle of 1973. The rate of inflation was high (7 percent) and the monetary policy was tightened and an anti-inflationary programme adopted. A moderation of the price increase was accompanied by a decline in the growth of all components of domestic demand. And, what later on appeared to be an important turning point in the post-war development of the German economy, the recession was accompanied by a deterioration of the labour market. The recession reached its lower turning point in Summer 1975. The input-output table for this year thus reflects the structure of the economy which had reached the lowest point in the recession and started to expand again. It includes two half-years with different character of an ending recession, the other one of a beginning upswing.

The upswing was the consequence of policies towards stimulating demand adopted in the Fall of 1974. Output started to grow again but the improvement of the labour market conditions was only marginal (inspite of the fact that, compared with the peak in late 1973, the number of foreign workers in German had fallen by almost one fourth). One of the reasons for the higher rate of unemployment was an increase in the number of young people entering the labour force, a consequence of the "baby boom" in the fifties and early sixties.

The recovery slowed down in 1977 due to an overall weakness of demand. But inflation was reduced and an upswing of investment activities started in the middle of 1977. In 1978 the overall level of economic activities continued to grow and inflation continued to decline. The most positive aspect of this normalization was a slight decline in the unemployment rate and an improved situation on the labour market. Employment was rising since late 1977, (the average year to year increase in employment between 1977 and 1978 was 141,000 employees (i.e. 0.7 percent of the total labour force). The improvement of the health of the German economy continued in 1979. The acceleration of expansion owed much to the fiscal policy measures taken in line with the programme of concerted action adopted by the OECD ministers in June 1978. The strongest impetus for growth came from investment, both from fixed capital as well as from stockbuilding. The continued growth had a strong positive effect on the labour market. The number of unemployed declined by 117,000 persons in that year, and total employment rose by 1.3 percent (i.e. by 315,000 persons). The improvement in demand for labour led even to the emergence of labour shortages for some specific skills. But 1979 was also the year of the "second oil crisis". The rise in the price of oil was sharp and also prices of other raw materials increased considerably. Inflation, which was almost dampened, accelerated again. Soon it was clear that 1979 marks an end of a successful period of German economic policy. The consequences of the recession and inflation, which both appeared in 1973, were almost overcome between 1977 and 1973. This development was interrupted in 1980. Due to the deflationary impact of the strong oil price rise on demand due to the seing in economic policies towards restricton, in Germany as well as other OECD countries, all main components of demand weakened considerably.

1980 is the other year for which an input-output table for Germany is available. Like 1975, 1980 is composed of two parts, which, however, follow in a reverse order. While in 1975 the recession had its lower turning point, it was the recovery which in 1980 reached its peak. The 1979 growth continued into the first months of 1980, but slowed down inthe second half of the year when the level of GDP declined. The downswing was most pronounced in exports. The rise in the oil price penetrated the domestic economy and was the main reason for the rise in the inflation rate. The weakness of private demand was supported by a rise in savings, which grew due to uncertainty about the future development. After several years of steady improvement since th mid-1970s labour market conditions started to deteriorate beginning in the middle of 1980.

In the following three years, up to 1983, the German economy did not recover from the second oil shock.

In 1981 monetary policy remained restrictive. Domestic demand, with the exception of public consumption, declined. The stagnation was felt on the labour market, employment began to be progressively adjusted to weak demand and output. The inflation rate was somewhat higher than in the previous year, but moderate compared to other OECD countries. The recession continued in 1982. The rise in unemployment was the strongest in the OECD area, due to combined effects of demographic influences on the labour supply and of weak demand for labour. Economic recovery started only at the beginning of 1983, contributed to the revival of domestic demand. But the labour market, in accordance with past experience, continued to deteriorate during the initial stage of the recovery. Both substantial productivity gains (which arise under such circumstances) and growing labour supply resulted in a further increase in the unemployment rate.

2.2.2 Input-output anatomy of changes in employment in Germany between 1975 and 1980.

Two most recent comparable input-output tables for Germany are available for the years 1975 and 1980. Due to the pattern of the business cycle of the German economy, these two years are not best suited for the study of changes in employment. Both were years of turning points. In 1975, the recession ended and recovery began; in 1980, recovery turned into recession. But available statistics allow no other choice.

German input-output tables used in the calculations were broken down by 32 industries. The results of calculations were, however, aggregated into the following seven sectors: agriculture, energy, basic materials, consumer goods, machinery, construction and services. The explanation of the results will focus on industry, i.e. on the production of basic materials (basic metals, mineral products, chemicals and rubber), of consumer goods (metal products, food industry, apparel, wood and paper) and of machinery (inclusive means of transportation).

The results of the first decompositon step are presented in Table 2.2.2.1.

The total number of economically active persons in the German economy increased between 1975 and 1980 from 25,746,000 to 26,251,000, i.e. by 505,000 persons. The increase was strong in services. The three manufacturing sectors, employment in the production of basic materials declined by 243,000, employment in the consumer the goods industry increased marginally, and employment in machinery increased by 118,000 persons. Positive impulses on employment originated quite, obviously, from economic growth, for the three manufacturing sectors they amounted to 895,000 persons. The actual change in employment in these sectors was a loss of 92,000 jobs. Thus almost one million, i.e. 987,000 jobs were lost either due to productivity gains or due to changes in technology. The importance of these two factors was different in the three sectors. Changes in technology were less important in the production of basic materials, i.e. the reduction of the use in these materials as inputs in the fabrication of other goods was not strong. Productivity gains, on the contrary, were significant. A more detailed breakdown of the results of calculations, (not reproduced here) shows the strongest effect of productivity gains in the chemical industry.

Job losses in the consumer goods production were to a large degree caused by changes in technology,and much less due to productivity growth. Detailed data show large job losses in metal products and in textiles, the output of both sectors was used less as inputs into production. For machinery, i.e. the effect of technological change but employment was positive, job losses caused by productivity gains were very large. They were concentrated in the production of machines and of electrical machinery.

The simple decomposition given in Table 2.2.2.1. can be further disaggregated. The effect of the GDP growth can be divided into positive effects of the growth of domestic demand and of exports and the negative effect of imports. In the manufacturing sectors, the effects of GDP growth and of the growth of domestic demand were almost identical. The employment effects of exports and imports have typical features of increasing intra-industry trade. The total effect of foreign trade on employment in the three manufacturing sectors was mild, it was a loss of 35,000 jobs only.

A further decomposition of the three components of the gross domestic product, gives more insight into the role of various kinds of structural change. It is presented in Table 2.2.2.3.

The last column of this table is identical with the second column of the previous table. The "impact of the growth of domestic final demand" can be further decomposed. The first three columns of the table show hypothetical effects of proportional growth under the assumption that all elements of domestic final demand grew at the same rate. Shifts between consumption and accumulation in 1975 and 1980, i.e. in critical years of the business cycle in Germany, should be taken with great caution. They are, anyhow, small in particular for manufacturing industries, and indicate that in 1980 investment was slightly in better shape than in 1975. Most important are the data in the last column of the table. Shifts in the commodity structure of domestic final demand had a pronounced impact on the employment level and structure. A large number of jobs minus 760,000 persons was lost. Gains (plus 535,000 persons) were recorded only in services, whose share in final demand increased due to shifts in the commodity structure of demand. The three manufacturing sectors have lost 58,000, 258,000 and 162,000 persons, respectively, i.e. altogether almost a half million (exactly 478,000) jobs. The losses in basic materials were small and occurred largely in mineral products. Also, the losses of jobs in machinery caused by shifts in the commodity structure were not very high. They were low in the car industry, (indicating the share of sales of cars in final demand did not change much between 1975 and 1980). The largest losses of the relative position on domestic market was found (in detailed results of calculations not reproduced here) in food processing, meat, and textiles.

The total effects of the other two components of gross domestic product, i.e. of exports and imports, and their joint effect (i.e. the effect of net exports or, in other words, of total foreign trade) are presented in tables 2.2.2.4, 2.2.2.5 and 2.2.2.6 respectively. The pattern of these three tables is identical. The first five columns show the effects of a proportional increase of exports, imports and their joint effect respectively. Trade is also decomposed into trade in goods and trade in services, and trade in goods is divided into trade with other developed countries, the newly industrialising countries and the other developing countries ("Other South"). The first five columns show the hypothetical effects of a proportional growth of all items of trade. Four columns which follow contain effects of changes in the regional structure of trade. The effects of changes in the commodity structure of trade are given towards the end. The last column then shows total effects of growth and structural change in trade. For exports and imports it is identical with the corresponding columns in Table 2.2.2.2.

The absolute figures in the first four columns show the relative importance of German trade with various regions and also the relative importance of trade in goods and trade in services. Exports to and imports from other developed countries prevailed in German foreign trade. Foreign trade with other developing countries was more important than trade with the new industrializing countries.

The second last column of the three tables show the impact of changes in the commodity structure of German foreign trade. The total effect of these changes is positive, but not due to manufacturing. Among the three manufacturing sectors, machinery has lost its share in foreign trade. The negative impact of this shift which amounts to minus 199,000 persons, was a joint effect of a lower share of machinery in German exports and a higher share of machinery in German imports. Consumption goods, on the contrary gained share in German imports and caused a net (hypothetical) increase of 46,000 jobs. The net effect of the change in the share of basic material was a loss of 14,000 jobs only. Share losses of machinery in German exports go exclusively on the account of general machinery, share gains of foreign machines in German imports go mainly on the account of office machinery and electric machines.

Some shifts in employment can also be explained by shifts in the regional composition of German foreign trade. These effects are, in general, not large. For net exports, one can record losses in trade with developed countries and with the newly industrialized countries and somewhat larger gains in trade with other developing countries. About 33,000 jobs were lost due to trade in machines. This was not only due to the penetration of products from the developing countries on the German market but due to a decline in the weight of German exports of machines to the Third World. A marginal penetration of the German market was achieved by the newly industrializing countries, but this impact was much lower than that of the penetration of machines from other industrial countries.

SUMMARY: The decomposition of changes in employment in Germany between 1975 and 1980 has shown a significant positive effect of economic growth on employment. German economic performance was relatively good between 1976 and 1979, but 1975 and 1980 were rather exceptional years. The postive effects of economic growth were dampened by productivity gains, but these were not exceptionally high. Losses of jobs in the German economy and in particular in German manufacturing were also caused by shifts in the structure of internal demand, particularly by a decline in the domestic share of semi-finished and finished products and by changes in the structure of consumption and investment. Compared with these effects, the impact of foreign trade, and in particular of foreign trade with the newly industrializing and other developing countries, was negligible. If jobs were lost, that was more due to lower German exports to these countries than due to penetration of imports from these countries into the German market.

Table 3.2.1.: Germany: Indicators of economic development: 1970-1983

Period	Gross domestic product (annual rate of increase in per cent)	Annual rate of inflation (in per cent)	Unemployment rate (in per cent)	Balance of current account (in per cent of GDP)	Exchange rate index DM per SDR (1970=100)
1970-1975 (average)	2.4	6.2	1.6	1.0	90.6
1975	-1.7	5.9	4.2	1.0	81.6
1976	5.5	4.6	4.1	0.9	79.4
1977	3.1	3.7	4.0	0.8	74.1
1978	3.1	2.7	3.9	1.4	68.7
1979	4.2	4.1	3.3	-0.8	64.7
1980	1.8	5.6	3.4	-1.9	64.6
1975-1980 (average)	3.5	3.9	3.8	-0.2	72.2
1981	0.0	6.3	4.8	-0.9	72.8
1982	-1.0	5.3	6.9	-0.6	73.2
1983	-1.0	3.3	8.4	-0.6	74.6
1980-1983 (average)	-1.0	5.3	5.9	-0.4	71.3

Table 2.2.2.1 Germany 1975 1980: Employment effects of GDP growth, productivity gains and structural change in technology

(1,000 persons)

Sector	Number of economically active persons			Effects of		
	1975	1980	Change	GDP growth	Productivity gains	Change in technology
Agriculture	1759	1422	-337	14	-387	35
Energy	509	493	-16	37	85	-138
Basic Materials	1735	1674	-61	232	-245	-48
Consumer Goods	3813	3570	-243	406	-76	-573
Machinery	3189	3222	33	257	-325	100
Construction	2071	2189	118	-2	29	91
Services	12670	13681	1011	3085	1967	-108
Total	25746	26251	505	4031	2885	-641

Table 2.2.2.2 Germany 1975 1980: Decomposition of the GDP growth effects on employment (1,000 persons)

Sector	Effect of growth of:			
	GDP	Domestic Final Demand	Exports	Imports
Agriculture	14	37	174	-197
Energy	37	58	43	-64
Basic materials	232	210	294	-272
Consumption goods	406	448	361	403
Machinery	257	272	323	-338
Construction	2	25	44	-21
Services	3085	2988	469	-372
Total	4031	3988	1709	-1666

Table 2.2.2.3 Germany 1975-1980: Changes in employment due to shifts in domestic final demand

(1,000 persons)

Sector	Growth of			Changes in composition of			
	Consumption	Accumulation	Domestic Final Demand	Consumption	Accumulation	Change in commodity structure	Total effect of domestic final demand
Agriculture	365	17	382	-5	1	-344	37
Energy	86	20	106	-1	1	-49	58
Basic materials	151	117	268	2	6	-58	210
Consumption goods	556	150	706	8	8	-258	448
Machinery	183	252	435	3	13	-162	272
Construction	46	352	398	-1	19	-423	-25
Services	2200	254	2453	-32	13	535	2988
Total	3587	1162	4749	-52	61	-760	3988

Table 3.2.2.4 Germany 1975 - 1980: Decomposition of total effects of exports on employment
(1000 persons)

Sector	Growth of exports to					Change in regional structure					
	North	NICs	Other South	Services	Total	North	NICs	Other South	Services	Change in commodity structure	Total effect of exports
Agriculture	91	1	12	6	110	11	0	-9	-1	64	174
Energy	56	1	5	4	66	7	0	-4	-1	-23	43
Basic materials	223	9	30	8	270	26	1	21	-1	24	294
Consumption goods	258	7	28	12	305	31	1	-20	-2	57	361
Machinery	360	21	59	7	447	43	3	42	-1	-124	323
Construction	10	0	1	22	33	1	0	-1	-3	11	44
Services	244	10	33	193	479	29	1	-23	-25	-10	469
Total	1242	49	169	251	1171	147	7	119	-32	-2	1709

Table 3.2.2.5 Germany 1975 1980: Decomposition of total effects of imports on employment
(1000 persons)

Sector	Growth of imports from					Change in regional structure				Change in commodity structure	Total effect of imports
	North	NICs	Other South	Services	Total	North	NICs	Other South	Services		
Agriculture	-213	-23	-40	-5	281	-30	-9	38	1	84	-197
Energy	-61	-2	-27	-2	-92	-9	-1	26	0	28	-64
Basic materials	204	-8	-17	-5	-234	-29	-3	16	1	-38	-272
Consumption goods	318	33	-34	-8	-393	-45	-13	33	1	-11	-403
Machinery	-240	-10	-9	-4	-263	-34	-4	9	0	-75	-338
Construction	-10	-1	-2	-16	-29	-1	-0	2	2	8	-21
Services	-257	-14	-64	-91	426	36	-5	62	9	55	-372
Total	-1303	-90	-193	-132	-1718	185	-35	186	13	51	-1666

Table 3.2.2.6 Germany 1975 - 1980: Decomposition of Total effects of net exports on employment
(1000 persons)

Sector	Growth of net exports					Change in regional structure				Change in commodity structure	Total effect of net exports
	North	NICs	Other South	Services	Total	North	NICs	Other South	Services		
Agriculture	122	22	27	1	171	-19	-9	30	-0	148	-23
Energy	-5	-0	-22	7	26	-2	-1	22	-0	5	-21
Basic materials	19	1	13	2	36	-2	-2	-5	-0	-14	22
Consumption goods	60	-26	-6	4	88	15	-12	13	-1	46	-42
Machinery	121	11	50	3	184	9	-1	-33	-0	-199	-15
Construction	0	0	-1	5	4	-0	-0	1	-1	19	23
Services	-13	-4	-31	102	53	-8	-4	39	-16	45	98
Total	-61	-41	-24	119	-7	-38	-28	67	-19	50	43

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2.5 United States

2.5.1 The United States economy between 1973-1983

Elementary information about the United States economy between 1970 - 1983 is given in Table 2.5.1. The table contains annual data from 1975 and average values for three subperiods: 1970-1975, 1975-1980 and 1980-1983. The framework of the table is identical with similar tables for other industrial countries.

Factors of change in employment in the United States will be investigated for the period 1973-1980. There is no US input-output table for 1975 which could be used for this purpose, the closest year to 1980 for which input-output statistics are available is 1973. The framework of this informative table, however, was not changed in order to preserve its comparability with similar tables for other developed countries.

In the seventies the average growth rate of U.S. GDP was satisfactory, the U.S. rate of inflation was not too high, unemployment was relatively high. In the first three years of the eighties economic growth was weak, inflation moderate and unemployment quite high. Average values, however, hide turbulent ups and downs of the American economy during that period.

1973 was an important turning point for the US economy. In 1972, the rate of GNP growth (5.4 per cent) was high, and the rate of inflation (3.3 per cent) moderate. But in 1973 a slowdown in the economic activity began. It was

influenced by capacity shortages, tighter fiscal and monetary policies and a sharp rise in prices, which negatively affected domestic demand. U.S. inflation was caused by worldwide food shortages, by the rise in commodity prices due to a commodity boom and, at the end of 1973, by a sharp rise in oil prices. The crisis of the international monetary system, in which the US dollar was the principal reserve currency, aggravated the inflationary development. 1973, the starting year of the seven year period for which the structural analysis of shifts in employment will be carried out, was a year of beginning recession and of a resurgence of inflation. Both recession and inflation broke out fully in 1974. The level of GNP declined by 0.9 per cent and the rate of inflation climbed to 11.1 per cent. The reasons for it were tight demand management policy, aiming at combatting inflation, and weak domestic demand and the rise in oil prices. Unemployment, however, did not react immediately to the weak demand. The unemployment rate, which in 1973 was low (4.9 per cent), increased in 1974 to 5.6 per cent only. In 1975 the recession continued, inflation remained high. But, 1975 was the year of beginning recovery, induced by expansionary measures. The recovery was fully under way in 1976, and inflation decelerated. The recovery continued in 1977. The rate of inflation, however, could not be further curbed and remained high. The recovery brought with it a significant rise in employment, which however, was matched by a rise in labour supply, so that the rate of unemployment changed little in 1976 and 1977. 1978 was the fourth and last year of the recovery from the 1974/1975 recession. The dynamic component of demand was private consumption, but business investment finally gained strength. Slow increase in labour productivity helped to improve the situation on the labour

market. A devaluation of the US$ vis-à-vis other currencies was among the resasons which led to an upsurge of prices. The first half of 1979 brought a further acceleration of inflation originating mainly in the domestic food market. Investment remained high. At the end of 1979 the sharp rise in oil prices stimulated inflation again. Combined with tightening fiscal and monetary policy, this price rise had deflationary consequences which led the American economy, after four years of remarkable recovery, into another recession. Thanks to the slow productivity rise, unemployment increased only due to a continued rise of labour supply.

1980 is the other year for which input-output for the United States is available. The position of this year in the business cycle differs sharply from the other year with an input-output table, i.e. from 1973. In 1973, the American economy was growing by 5.7 per cent, and the rate of inflation was 6.2 per cent. In 1980, output was below the level of the preceding year, and the rate of inflation was twice as high as in 1973. Except for 1974 and 1975, (which were also recession years) the performance of the American economy in the other four years of the period 1973-1980 was much better than in 1980, and to some degree even better than in 1973. The second half of seventies was also a period of slow productivity growth, which balanced the rise in the labour supply caused by the baby boom in the past and by rising female employment. In fact, the number of employed increased markedly throughout the seventies.

The early eighties are a period of combatting of inflation. A short-lived recovery started in late 1980, and in 1981 output was rising again. Productivity was also rising, so that despite a deceleration in the growth of population of working age, the unemployment was increased again. Inflation remained high. Another recession came in the second half of 1982. The downturn had a pronounced effect on labour market conditions, but inflationary pressures were reduced. In 1983 the United States economy recovered again. Employment increased, but the rise in demand for labour could only balance its growing supply. Inflation continued to fall.

2.5.2 Input-output anatomy of changes in employment in the United States between 1973 and 1980.

Two recent comparable input-output tables for the United States are available for 1973 and 1980. As mentioned above, the position of both years in the US business cycle was rather different. In the tormer year a boom ended and inflation was moderate, the latter year was a year of recession and high inflation.

The United States input-output tables used in the decomposition of structural impact on employment are broken down by 32 industries. The results of calculations are presented for seven aggregate sectors, i.e. for

agriculture, energy, basic materials, consumer's goods, machinery and services. The comments on results will focus on the production of basic materials (metal mining, stone quarrying, chemicals, plastic materials, mineral products and basic metals), on consumers' goods (food, tobacco, textiles, apparel, leather, wood, furniture, paper, printing, metal products and, instruments) and on machinery (general machinery, electrical machinery, transportation equipment).

The first step of the input-output decomposition is given in Table 2.5.2.1. The total number of employees (contrary to other countries for which this exercise was carried out, self-employed are not included) in the United States economy in 1973 was 80,300,000 persons, and 93,935,000 in 1980. The increase in total employment by 13,365,000 persons over seven years is remarkable. It absorbed a large share of the growing labour supply, but was not large enough to avoid an increase in unemployment. Among the manufacturing sectors, the employment level remained unchanged in the production of basic materials. 309,000 jobs were lost in the consumer's goods industry. 497,000 new employment opportunities were created in machinery. The total change of employment in those three manufacturing sectors was rather small, it amounted to an increase of 204,000 employees. A detailed breakdown locates the job losses mainly in textiles, apparel and basic metals, employment gains in general machinery, electrical machinery, transportation equipment, instruments, and printing.

The total effect of productivity gains on employment was, in relation to the impact of the GDP growth, remarkably low. A substantial part of the

employment increase in the United States economy was due to the productivity slowdown. This finding, however, is not valid for the three manufacturing sectors; productivity gains in all of them, and particularly the consumers' goods industries, were substantial in relation to growth effects. Detailed results show that this is true in particular for the food industry, textiles, apparel, chemicals, basic metals, metal products, electrical machinery and transportation equipment. (It is also likely that the number of the self-employed in the United States was not rising so fast as the number of the employed persons. The slowdown of productivity growth of the total number of the economically active persons was probably less dramatic than that reflected in Table 2.5.2.1.). The impact of the shifts in technology, i.e. in the demand for intermediate products, was positive, but modest. Its structure shows an increase in the demand for intermediate services (like trade and financial services).

The first aggregate picture of the pattern of employment change is further disaggregated in the tables which follow. Table 2.5.2.2 shows a partition of the GDP growth effect into the positive impact of the domestic demand and exports, and the opposite impact of imports. Table 2.5.2.2 shows, that foreign trade influence on the United economy, which has a huge internal market, is much less felt than in other industrial countries. The total net effect of foreign trade on employment was modestly positive (an increase of 324,000 jobs). In the three manufacturing sectors, the net effects of foreign trade were small, gains of 19,000 and 57,000 employment opportunities in basic materials and machinery respectively, and a loss of 14,000 jobs in the consumers' goods production. These aggregate values, however, hide important gains in general machinery and transportation equipment, and more negligible losses in the apparel and leather industries.

A further decomposition of structural change by components of the gross domestic product allows an insight into the role of various kinds of structural change. A decomposition for domestic final demand is given in Table 2.5.2.3. Domestic final demand determines the development of employment in the United States economy. Shifts in the pattern of total domestic demand (second last column of table 2.5.2.3) had only a small total impact on employment. They have, however, influenced strongly its structure. Changes in demand favoured service employment and influenced negatively employment in basic materials (a loss of 193,000 jobs) and in the consumer's goods sector (a loss of 166,000 jobs). Their impact on the employment in machinery was with 53,000 new employment opportunities positive, but modest. These aggregate figures hide, however, relatively more important gains and losses which can be seen in more disaggregated results. Gains in general and electrical machinery can be mentioned on the positive side, losses in food, wood products and basic metals on the negative side.

Shifts in the pattern of domestic demand in the United States economy between 1973 and 1980 reflect partly changes in private consumption induced by rising real household income. They reflect also differences in the position of the United States economy in the business cycle in 1973 and 1980. The negative effects due to a lower weight of accumulation are the consequences of weak investment activity in the recession year 1980. A more detailed breakdown of results of calculations allows to allocate it mainly to the general and electrical machinery industries.

The effects of changes in the other two components of gross domestic product, i.e. in exports and imports, and their joint effect, i.e. that of net exports are presented in Tables 2.5.2.4, 2.5.2.5 and 2.5.2.6 respectively. The pattern of these three tables is identical. Trade is divided into trade in services, and in goods, and trade in goods further decomposed by three regions: developed countries, newly industrializing countries and other developing countries ("Other South"). The first five columns show the hypothetical effects of a proportional growth of trade, the following four columns the impact of shifts in regional structure, and the second last column the effect of changes in the commodity structure of the United States foreign trade.

The impact of foreign trade on employment in the United States was modest. The level of the economic activity of the country is to a large degree dependent on domestic demand. The second last column of the three tables shows the impact of changes in the commodity composition of the United States trade. In exports, the three manufacturing sectors increased modestly their shares (mainly at the expense of agricultural exports which were obviously weaker in 1980 than in 1973). These increases were however, mainly a consequence of an intensification of intra-industry trade, the shares of all three sectors in the United States imports increased too. The final outcome of both structural shifts was negligible. One can see in Table 2.5.2.6 minor positive effects of 10,000 and 4,000 jobs in basic materials and consumers' goods sectors, and a minor loss of 11,000 jobs in machinery.

The first columns of Table 2.5.2.3 show, that the developing countries, both the newly industrializing and the other developing countries are an important market for United States exports. Shifts in the regional structure increased the importance of these markets for the United States economy. Main gains were achieved on the markets of the other developing countries, not in the newly industrializing countries. This applies both tc the total of United States exports and to exports of the three manufacturing sectors. A detailed breakdown of results shows that general machinery made the most important gains. The developing countries were also, as Table 2.5.2.5 indicates, an important source of United States imports. Between 1973 and 1980, they strengthened their position on the United States internal market at the expense of the developed countries. Gains were achieved mainly by the newly industrializing countries, and were particularly important in the consumers' goods industry (a hypothetical loss of 77,000 U.S. jobs due the structural shift in favour of this country group). More detailed results of calculations allow to allocate the market gains by the newly industrializing countries to textiles, apparel, wood products and leather.

The joint effect of exports and imports is given in Table 2.5.2.6. In foreign trade, United States lost jobs in trade with the developed countries and with the newly industrializing countries, and gained jobs in trade with the other developing countries. Losses were most pronounced in consumers' goods sector in the trade with the newly industrializing countries (minus 68,000 jobs). Compared to the size of employment in the consumer goods sector in the United States (which in 1980 employed 9,965,000 persons), these losses are not domestic. A more detailed breakdown of results allows to allocate them to apparel, leather an wood industries.

Summary. The input-output decomposition of changes in employment in the United States has shown that the remarkable increase in employment (by almost 15 per cent between 1973 and 1980) was mainly due to a fast rise in domestic demand, accompanied by a relatively slow rise in labour productivity. The new employment opportunities were created mainly in services. Employment in the three manufacturing sectors remained roughly stable, there was a shift from consumers' goods to machinery. This shift was a consequence of relatively very fast productivity growth in the consumers' goods sector, of changes in domestic demand and also of shifts in foreign trade. A small portion of the losses in the consumer's goods industry can be attributed to trade with newly industrializing countries.

2.7 France

2.7.1 The French Economy between 1975-1983

A single review of the development of the French economy in the seventies and early eighties is given in Table 2.7.1. The table contains annual data from 1975 onwards and averages for the following three subperiods: 1970-1975, 1975-1980, 1980-1983.

The analysis of changes in the number of economically active persons in France will focus on the second half of the seventies. This period occupies a middle position among the three subperiods defined above. Data in Table 2.7.1. reveal a steady worsening of the French economic performance after 1970. Economic growth rate, inflation rate and unemployment rate were the best in early seventies, worsened in late seventies and worsened again in the early eighties. The exchange rate of the French Franc was stable through the seventies, but could not be held in the eighties.

The early seventies were a time of sustained expansion of the French economy. GDP growth rates in first four years, starting with 1970 and ending with 1974, were over five percent. Annual inflation rate increased moderately from 5.5 percent in 1970 to 7.4 percent in 1973. The unemployment rate was below two percent. The oil crisis in 1973-1974 made its initial impact much more in terms of the heightened inflation than of a slowdown in economic activity: in 1974 the inflation rate increased dramatically to 13.7 percent, but the annual rate of GDP growth was still 3.2 percent. The decline in output was mainly a result of more restrictive economic policy. Although total employment grew in 1974, the labour market situation deteriorated due to a fast rise in the labour supply, so that the unemployment rate increased from 1.8 to 2.3 percent. In 1975, the French economy did not escape the world-wide recession. The growth of private consumption slowed down markedly, there was a fall in private investment (both residential and business), a significant destocking and a fall in exports. Only public investment made a positive contribution to the level of economic activity. The situation on the labour market deteriorated. At the end of the year a strong upswing began, led by restocking and private consumption.

1975 is one of the years for which a comparable input-output table for France is available. 1975 was not a "normal" year but a year of a turning point in the business cycle. Severe recession lasted during the first three quarters of the year, recovery began towards its end. Business investment was most strongly hit by the recession. 1975 was also a year of a sudden rise in prices and of a significant rise in unemployment.

In 1976 came a strong recovery, led by public expenditure, private consumption, restocking and better exports. Imports were also rising fast and caused a deterioration of the balance of payments. The rise in prices eased due to lower prices of imports. The upturn in economic activity served, however, no more than to hold unemployment at its level. Towards the end of 1976, another cyclical swing began. The rate of growth slowed down, and economic activity was stimulated only by a rise of private consumption. The situation on tne labour market further deteriortated. But in 1975 and 1976, the impact of fluctuations of output on employment was partly cushioned by firms' behaviour, an increase in short-time working allowed a considerable retention of labour. During the recovery, however, the increase in employment was moderate. Since 1977 employment began to adjust to production more quickly. In 1977 economic growth slowed down, but inflation persisted at quite a high level. A moderate growth acceleration in 1978 was stimulated by private consumption and a slight recovery of public and business investment. But unemployment again increased slightly, and inflation remained on the high level of previous years. Moderate steady growth continued in 1979. In spite of a small increase in the total number of employed, unemployment continued to rise. The labour supply was growing fast and productivity gains did not allow to absorb it by the growth of output. In the second half of 1979 inflation accelerated, partly as a result of increases in oil prices. In 1980, the French economy slid into another recession accompanied by a sharp rise in price. The GDP rate of growth was 1.1 percent only, the rate of inflation 13.5 percent. The situation on the labour market worsened.

1980 is another year for which a comparable recent input-output table for France is available. It does not difter much from the other year with an input-output table, i.e. from 1975. Both were years of stagnation and of a sharp rise in inflation. They differs, however, in two aspects. Towards the end of 1975 a strong recovery began. This was not the case in 1980. In 1975

the employment impact of growth deceleration was absorbed by shorter working hours, whereas in 1980 employment adjusted to weak output. The economic situation in both years also differ markedly from the situation in the other years of the second half of the seventies. 1976 was a year of a strong upswing, the following three years had rather similar features: GDP growth of the order of 3 percent per year, a rise in consumers' prices in the region of 10 percent a year, mounting unemployment and, also a steady improvement in the current balance. The exchange rate of the French Franc vis-à-vis the currencies of other developed nations remained, in spite of the high inflation, stable.

The first three years of the eighties were very different. The recession of 1980 continued during the first half of 1981. A moderate recovery began, stimulated mainly by a rise in private consumption. 1981 was also a year of a profound change in the objectives of the economic policy. While in the past the priority had been given to inflation control as a means of restoring competitiveness, the primary objective of the new policy was to reduce unemployment. Paradoxically enough, in 1982 and 1983 (as Table 2.7.1 clearly shows) the abandoned objective of reducing inflation was to some degree achieved, the new objective of dampening unemployment, not.

2.7.2 Input-output anatomy of changes in employment in France between 1975 and 1980

The two recent comparable input-output tables for France refer to years with a similar position in the business cycle. Both 1975 and 1980 were years of depression and of a marked acceleration of inflation. Towards the end of 1975, however, a strong recovery began. No recovery of the French economy followed the year 1980. Both years are also not typical for the economic development in the second half of the seventies: 1976 was a good year, and the period between 1976-1979 was characterized by a moderate but steady growth.

French input-output tables used for the analytical calculations were disaggregated by 35 industries. The results of calculations were aggregated into seven large sectors; agriculture, energy, basic materials, consumer goods, machinery, construction and services. The comments on the results will

focus on the three manufacturing sectors. Basic materials include basic metals, minerals, chemicals and rubber; consumer goods include metal products, food, beverages, tobacco, apparel, wood and paper; machinery includes general machinery, office and electrical machines, cars and ships.

The first step in the input-output decomposition gave figures presented in Table 2.7.2.1. The total number of economically active persons in the French economy was 21,213,000 in 1975 and 21,617,000 persons in 1980. The increase of 386,000 economically active persons in five years was rather small. The three manufacturing sectors lost together 364,000 persons. The losses were concentrated in the consumer goods industry (a loss of 222,000 persons), in particular in textiles (106,000 persons less) and in metal products (56,000 persons less). The next column of the table shows the hypothetical employment stimuli due to GDP growth. They were slightly strenghtened by changes in technology (i.e. by shifts in the patterns of intermediate demand given in the last column. The counter-balancing job saving impact of productivity gains was quite strong both for the whole economy and particularly strong for the three manufacturing sectors. The sum of the positive growth effects for these three sectors was 729,000 jobs, total job savings due to productivity growth amounted to 1,128,00 jobs, and the negative balance of both effects was thus 399,000 jobs. Half of them (199,000 jobs) were lost in the consumers goods sector. (The negative balance of economic and productivity growth was very important in textiles - a loss of 99,000 jobs).

The positive employment effects of the GDP growth are further disaggregated in Table 2.7.2.2. French foreign trade had a negative impact on employment, fewer jobs were created by exports (1,193,000 persons) than lost due to imports (minus 1,324,000 jobs). The negative employment balance of total foreign trade was 131,000 jobs. Foreign trade in all three manufacturing sectors reduced employment: by 12,000 persons in basic materials, by 109,000 prsons in the consumers goods sector and even by 88,000 persons in machinery. Detailed results allow to identify industries which were the important losers: textiles (minus 48,000 jobs), electrical machinery (minus 41,000 jobs) and office machinery (minus 37,000 jobs).

Further decomposition of the three components of gross domestic product provides information about the importance of other kinds of structural change for employment in France. Table 2.7.2.3 shows the role of structural shifts in domestic demand. The first two columns show the effects of proportional growth of consumption and accumulation respectively. The impact of shifts between both components of domestic demand suggests that, inspite of heavy recession, investment in 1980 was better off than in 1975. Shifts in the commodity composition of domestic demand were the most important factor. Their total effect was a loss of 300,000 jobs between 1975 and 1980. Mainly Consumer goods lost shares in domestic demand. The consequence was a hypothetical reduction of employment by 72,000 jobs (most pronounced in textiles, where 70,000 jobs were lost). Machinery gained shares in domestic demand. The strong positive impact on employment (a hypothetical gain of 144,000 jobs), was concentrated mainly in the production of cars (plus 65,000 jobs), electrical machines (plus 65,000 jobs) and office machines (plus 36,000 jobs). These opposite trends reveal a fast structural change of French economy.

The decompositon of structural changes shaping exports, imports and their joint effect are given in Tables 2.7.2.4, 2.7.2.5 and 2.7.2.6. The framework of these three table is identical. The first five columns show the effects of a proportional increase of trade in goods and services. Trade in goods is divided by three regions: developed counries, newly industrializing countries and other developing countries. The four columns which follow show the shifts in the regional structure of foreign trade. The second last column contains interesting information about the employment impact of structural changes in exports and imports.

Developed countries were the main market for French exports. They were followed by the other developing countries (which were an important market for French manufacturing). Few French exports went to newly industrializing countries. The commodity composition of French exports changed little between 1975 and 1980.

The developed countries were also the main source of French imports. They were followed by developing countries with the newly industrializing countries ranking last. Shifts in the regional structure of imports raised the

importance of the developed and newly industrializing countries. In commodity compositon of French imports, the role of manufacturing increased at the expense of agriculture and energy.

The total effect of shifts in French trade, (i.e. of net exports) was a net hypothetical loss of 130,000 jobs. It was caused mainly by losses in the consumer goods industry (minus 109,000 jobs) and in machinery (minus 88,000 jobs). These losses originated in shifts in the commodity composition of French foreign trade and occured mainly in trade with the developed countries.

Summary: The second half of the seventies was a period of a good performance of the French economy in terms of economic growth and of less satisfactory performance in terms of inflation and unemployment. The total number of economically active persons increased little. Productivity gains were important. The structure of French manufacturing changed in favour of machinery, at the expense of the consumer goods industry. Machinery, however, gained ground mainly in the domestic French market and lost little in foreign trade. This loss was an important part of job losses caused by the imbalance between the increases in French exports and imports.

Table 2.7.1: France: General Indicators of economic development: 1970-1983

Period	Gross domestic product (annual rate of increase in per cent)	Annual rate of inflation (in per cent)	Unemployment rate (in per cent)	Balance of current account (in per cent of GDP)	Exchange rate index FF per SDR (1970=100)
1970-1975 (average)	4.2	8.8	2.2	0.1	98.7
1975	0.2	11.7	3.9	0.8	93.7
1976	5.2	9.6	4.3	-0.1	99.7
1977	3.1	9.5	4.8	-0.1	103.3
1978	3.8	9.2	5.2	1.5	101.7
1979	3.3	10.6	6.0	0.9	99.0
1980	1.1	13.5	6.4	-0.6	99.0
1975-1980 (average)	3.3	10.3	5.1	0.2	99.3
1981	0.2	13.3	7.8	-0.8	115.4
1982	2.0	12.0	8.8	-2.2	130.6
1983	1.0	9.5	9.0	-0.8	146.7
1980-1983 (average)	1.2	11.6	8.0	-1.1	122.93

Table 2.7.2.1 France 1975-1980: Employment effects of GDP growth, productivity gains and structural change
(1,000 persons)

Sector	Number of employed			Effects of		
	1975	1980	Change	GDP growth	Productivity gains	Change in technology
Agriculture	2127	1868	-259	229	-485	-2
Energy	302	307	5	88	-77	-6
Basic Materials	1163	1077	-86	172	-299	41
Consumer Goods	2797	2575	-222	247	-446	-22
Machinery	1704	1648	-56	310	-383	17
Construction	1890	1815	-75	-43	-22	-9
Services	11248	12327	1079	2070	-1151	-159
Total	21231	21617	386	3072	-2864	177

Table 2.7.2.2 France 1975-1980: Decomposition of the GDP growth effects on employment
(1,000 persons)

Sector	Effect of growth of:			
	GDP	Domestic Final Demand	Exports	Imports
Agriculture	229	143	189	103
Energy	88	113	30	-55
Basic materials	172	184	211	-223
Consumption goods	247	356	198	-307
Machinery	310	398	198	-286
Construction	-43	-43	10	-10
Services	2070	2051	358	-339
Total	3072	3203	1193	-1324

Table 2.7.2.3 France 1975-1980: Changes in employment due to shifts in domestic final demand

(1,000 persons)

Sector	Growth of			Changes in composition of			
	Consumption	Accumulation	Domestic Final Demand	Consumption	Accumulation	Change in commodity structure	Total effect of domestic final demand
Agriculture	286	10	296	-10	1	-153	143
Energy	57	16	73	-2	2	40	113
Basic materials	99	70	168	-3	8	15	184
Consumption goods	327	102	428	-11	11	-72	356
Machinery	107	148	254	-4	16	-144	398
Construction	40	257	297	-1	28	-340	-43
Services	1785	202	1987	-60	22	65	2051
Total	2699	805	3504	-91	87	-300	3203

Table 2.7.2.4 France 1975 - 1980: Decomposition of total effects of exports on employment
(1000 persons)

Sector	Growth of exports to					Change in regional structure				Change in commodity structure	Total effect of exports
	North	NICs	Other South	Services	Total	North	NICs	Other South	Services		
Agriculture	124	1	35	1	162	8	0	-3	-0	27	189
Energy	20	0	5	4	29	1	0	-0	-1	1	30
Basic materials	144	5	37	5	190	9	0	-4	-1	21	211
Consumption goods	160	5	45	5	214	10	0	-4	-1	-16	198
Machinery	147	8	57	9	220	9	0	-5	-1	-23	198
Construction	6	0	2	2	9	0	0	-0	-0	0	10
Services	148	5	44	182	380	9	0	-4	-25	-22	358
Total	749	24	224	207	1204	48	1	22	-29	-11	1193

Table 2.7.2.5 France 1975 1980: Decomposition of total effects of imports on employment
(1000 persons)

Sector	Growth of imports from					Change in regional structure				Change in commodity structure	Total effect of imports
	North	NICs	Other South	Services	Total	North	NICs	Other South	Services		
Agriculture	117	13	-35	-0	-165	-24	-12	31	0	62	-103
Energy	-35	-1	-41	-2	-79	-7	-1	36	1	23	-55
Basic materials	-180	-4	-16	-2	-202	-36	-4	14	1	-71	-223
Consumption goods	-221	-13	-22	-3	-259	-45	-12	19	1	-48	-307
Machinery	-210	-5	-3	-4	-222	-42	-5	3	1	-64	-286
Construction	-7	-0	-2	-2	-11	-1	-0	1	0	1	-10
Services	-202	-8	-43	-119	-371	-41	-7	38	36	33	-339
Total	-977	-45	-160	-132	-1309	-196	-40	143	40	15	-1324

Table 2.7.2.6 France 1975 - 1980: Decomposition of Total effects of net exports on employment
(1000 persons)

Sector	Growth of net exports					Change in regional structure				Change in commodity structure	Total effect of net exports
	North	NICs	Other South	Services	Total	North	NICs	Other South	Services		
Agriculture	8	-12	1	0	-4	-16	-12	28	0	89	86
Energy	-15	-1	-36	2	-49	-6	-1	36	0	25	-25
Basic materials	-37	1	22	2	-12	-27	-3	10	-0	-0	-12
Consumption goods	61	9	23	2	44	-34	11	15	0	-65	-109
Machinery	63	3	54	5	7	-33	-4	-3	0	-86	-88
Construction	2	-0	0	0	-1	-1	0	1	0	1	-0
Services	-54	-2	1	62	8	-31	-6	34	11	11	19
Total	-223	-20	64	75	105	-148	-38	121	11	-26	-130

Table 3.1 Relation between imports from newly industrializing countries and unemployment rates.

	Share of imports of newly industrializing countries*								
	as percentage total imports			as percentage of GDP			unemployment rate		
	1975	1980	1983	1975	1980	1983	1975	1980	1983
France	1.8	3.1	3.4	0.3	0.7	0.7	3.9	6.4	9.0
Germany	4.0	4.5	4.9	0.7	1.0	1.0	4.2	3.4	8.4
Italy	3.0	3.2	3.7	0.6	0.7	0.8	5.3	8.0	11.9
Japan	9.0	4.6	13.1	1.1	2.8	1.6	1.9	2.0	2.7
United Kingdom	3.6	3.8	4.6	0.9	1.4	1.3	3.8	6.3	11.5
United States	8.8	14.5	17.9	0.6	0.7	1.0	8.5	7.1	9.6

* Argentina, Brazil, Hong Kong, Malaysia, Mexico, Philippines, Republic of Korea, Singapore, Thailand.