

Provisional figures of Gross Domestic Product for the European Union, 1993

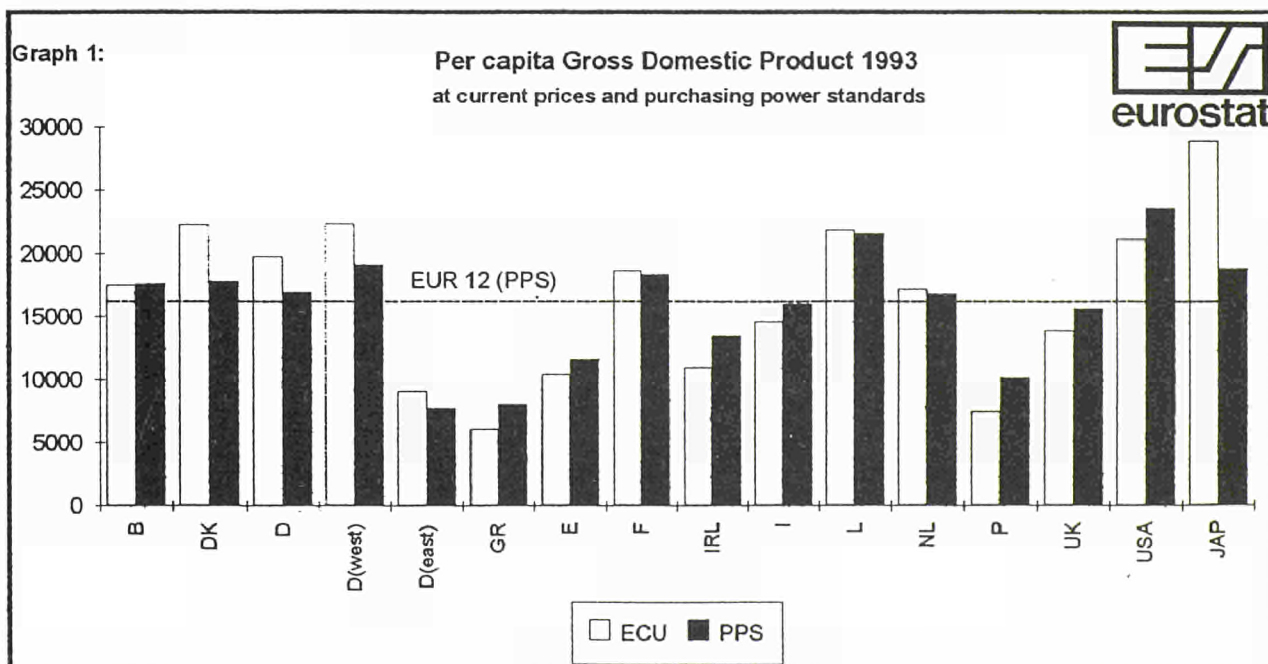
- Position of Germany three years after unification -

The Statistisches Bundesamt has recently published revised national accounts data for 1993 for Germany as a whole and for the old and the new Länder separately. 1) It is thus possible to consider developments in the economy since unification, both within Germany and as regards their impact on the Union, using figures from 1991 to 1993.

Part one is an international comparison based on GDP values. It puts changes within Germany, and the development of the country as a whole, into the

context of the European Union and compares the Union with the USA and Japan.


Part two of this report examines the differences in levels and structures between the two parts of Germany and attempts to show how the level of development in the new Länder is gradually catching up with that of the old, using to illustrate this point the main aggregates of the generation and use of Gross Domestic Product (GDP) and the main variables of the distribution account.



1) See: 'Vierteljahresergebnisse der Inlandsproduktsberechnung', 4. Vierteljahr 1993, Fachserie 18, Volkswirtschaftliche Gesamtrechnungen, Reihe 3, Statistisches Bundesamt, March 1994

Table 1:


Gross Domestic Product - International comparison 1991-1993
at current prices and exchange rates

	Gross Domestic Product			Gross Domestic Product			Gross Domestic Product			% of EUR 12		
	ECU billion			percentage of EUR 12			per capita			per capita GDP		
				%			ECU			%		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
EUR12	5182.2	5422.0	5471.8	100	100	100	15407	16045	16117	100	100	100
Belgium	158.8	169.1	176.2	3.1	3.1	3.2	15878	16834	17498	103.1	104.9	108.6
Denmark	104.6	109.3	115.5	2.0	2.0	2.1	20295	21141	22250	131.7	131.8	138.1
Germany	1373.1	1498.5	1604.8	26.5	27.6	29.3	17167	18593	19765	111.4	115.9	122.6
- old Länder	1284.9	1383.0	1462.5	24.8	25.5	26.7	20053	21321	22315	130.2	132.9	138.5
- new Länder	88.2	115.5	142.3	1.7	2.1	2.6	5544	7343	9090	36.0	45.8	56.4
Greece	56.8	60.1	62.8	1.1	1.1	1.1	5569	5846	6061	36.1	36.4	37.6
Spain	426.7	444.1	408.3	8.2	8.2	7.5	10934	11354	10418	71.0	70.8	64.6
France	970.0	1022.0	1069.4	18.7	18.8	19.5	17107	17917	18654	111.0	111.7	115.7
Ireland	36.2	38.7	38.9	0.7	0.7	0.7	10267	10908	10924	66.6	68.0	67.8
Italien	932.3	943.0	847.3	18.0	17.4	15.5	16131	16288	14584	104.7	101.5	90.5
Luxembourg	7.6	8.2	8.6	0.1	0.2	0.2	19638	20865	21772	127.5	130.0	135.1
Netherlands	234.5	247.6	262.6	4.5	4.6	4.8	15565	16309	17160	101.0	101.6	106.5
Portugal	63.3	74.3	73.4	1.2	1.4	1.3	6419	7537	7442	41.7	47.0	46.2
United Kingdom	818.3	807.1	804.0	15.8	14.9	14.7	14195	13952	13857	92.1	87.0	86.0
United States	4618.4	4651.8	5447.8	89.1	85.8	99.6	18276	18207	21091	118.6	113.5	130.9
Japan	2709.1	2823.8	3600.0	52.3	52.1	65.8	21862	22717	28875	141.9	141.6	179.2

Source: Eurostat calculations on the basis of national data and estimations of the Commission

Table 2:

Gross Domestic Product - International comparison 1991-1993
at current prices and purchasing power standards

	Gross Domestic Product			Gross Domestic Product			Gross Domestic Product			% of EUR 12		
	PPS billion			percentage of EUR 12			per capita			per capita GDP		
				%			PPS			%		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
EUR12	5179.5	5414.7	5481.5	100	100	100	14998	15605	15725	100	100	100
Belgium	161.1	171.8	177.0	3.1	3.2	3.2	16108	17103	17577	107.4	109.6	111.8
Denmark	84.8	86.2	92.5	1.6	1.6	1.7	16453	16673	17819	109.7	106.8	113.3
Germany	1268.1	1353.5	1372.4	24.5	25.0	25.0	15854	16793	16903	105.7	107.6	107.5
- old Länder	1186.6	1248.8	1251.6	22.9	23.1	22.8	18519	19252	19097	123.5	123.4	121.4
- new Länder	81.5	104.7	120.8	1.6	1.9	2.2	5122	6654	7719	34.1	42.6	49.1
Greece	74.7	80.6	83.0	1.4	1.5	1.5	7324	7840	8010	48.8	50.2	50.9
Spain	467.2	473.4	455.7	9.0	8.7	8.3	11972	12103	11627	79.8	77.6	73.9
France	977.5	1006.8	1048.7	18.9	18.6	19.1	17239	17650	18293	114.9	113.1	116.3
Ireland	39.2	42.6	47.9	0.8	0.8	0.9	11117	12007	13451	74.1	76.9	85.5
Italien	919.0	952.0	932.0	17.7	17.6	17.0	15901	16443	16042	106.0	105.4	102.0
Luxembourg	7.6	8.1	8.5	0.1	0.1	0.2	19638	20611	21519	130.9	132.1	136.8
Netherlands	233.5	243.5	256.7	4.5	4.5	4.7	15498	16039	16774	103.3	102.8	106.7
Portugal	96.9	103.8	100.1	1.9	1.9	1.8	9826	10530	10149	65.5	67.5	64.5
United Kingdom	849.9	892.4	907.0	16.4	16.5	16.5	14743	15427	15632	98.3	98.9	99.4
United States	5348.5	5751.0	6075.6	103.3	106.2	110.8	21166	22509	23521	141.1	144.2	149.6
Japan	2200.3	2330.2	2342.7	42.5	43.0	42.7	17755	18746	18791	118.4	120.1	119.5

Source: Eurostat calculations on the basis of national data and estimations of the Commission

Since the data for Germany are established in line with the German system of national accounts, some figures, such as those for private and general government consumption, may differ from the figures found in Eurostat publications.

International comparison of GDP 1991-1993

The Union's 1993 GDP, including the new Länder, was ECU 5471 billion. This value includes preliminary data from the Member States on their 1993 GDP and, for Greece, Portugal, Belgium, Ireland and Luxembourg, Commission estimates. These estimates make a share of only 6.6% of Union GDP.

Since 1991, there has been a steady increase in the share of the Union's GDP accounted for by the new Länder (Table 1). The share for 1991, expressed in ECU at current prices and exchange rates, was only 1.7%, but by 1992 it had risen to 2.1% and by 1993 to 2.6%. Since the share accounted for by the old Länder also increased from year to year, by 1993 Germany was contributing 29.3% to the GDP of the Union as a whole. In 1991 the figure had been 26.5% and in 1992 27.6%.

The Commission estimates that the GDP of the United States in 1993 was ECU 5447.8 billion, roughly the same (99.3%) as that of the Union. On the other hand, Japan's GDP was ECU 3600 billion, roughly two-thirds that of the Union. In 1991 and 1992, the percentage of the GDP of the United States and Japan of the Union GDP had been much lower than in 1993 (Table 1). This calculation in ECU is strongly affected, of course, by exchange rate fluctuations, especially with the US\$ and the Yen appreciating strongly against the ecu in 1993.

If one considers **per capita GDP in nominal ecu terms**, the new Länder have depressed the average value of Union per capita GDP in all three years, and have had an even more markedly negative effect on the average value for Germany as a whole. The trend is now upwards, however: in 1991 average per capita GDP in the Union was 3.1% lower if the new Länder were included than it would have been otherwise, but in 1992 it was only 2.6% lower and by 1993 2.1%. The per capita GDP value for Germany including the new Länder was 14.4% lower in 1991, 12.8% in 1992 and 11.4% in 1993 than the level for the former Federal Republic.

In 1991, the new Länder had the lowest per capita GDP in the Union at around ECU 5 540. In 1992, with around ECU 7 340 per capita, they moved up to rank between Greece and Portugal. In 1993, with ECU 9090, they overtook Greece and Portugal but did not quite catch up with Spain (Table 1). In all three years, Germany came in third place in the Union behind Denmark and Luxembourg.

There are differences for instance concerning private consumption and general government consumption. The figures by country may also differ, since this report uses data which have already been revised at national level.

If **purchasing power parity** is used instead of the ECU exchange rate to convert data in national currency into comparable units, the values obtained are expressed in purchasing power standards (PPS). Purchasing power parity is ascertained via the ratio of the prices for a basket of comparable and representative goods and services in the different countries. PPS values are more appropriate for an international comparison than ECU data, since they are not directly affected by exchange rate fluctuations and are a more accurate reflection of the actual purchasing power of a given currency within the economic area of its home country.

Parities for 1993 are estimated by Eurostat and are provisional. As regards the parity for Germany, Statistisches Bundesamt calculations show that there is very little change in the DM/PPS parity when the new Länder are included. In this report, therefore, the parity of the former Federal Republic has been used for the new Länder and thus for Germany as a whole by approximation.

The results of the international comparison at current prices and purchasing power standards are shown in Table 2. Graph 1 compares the per capita GDP of the Member States, the USA and Japan in ECU and PPS terms.

Table 2 shows quite clearly that, in purchasing power standards terms, the per capita GDP of the new Länder was the lowest in the Union in all three years, although by 1993 it was almost level with that of Greece. The new Länder are catching up: the highest per capita GDP in the Union, Luxembourg's, was four times as high as that of the new Länder in 1991 but only three times as high in 1993. Germany, which before unification regularly had been in second place in the PPS league table, fell back to sixth place in 1991, although it subsequently recovered some of the lost ground.

Another point worth noting is that Japan's per capita GDP, which in ECU terms was almost 80% higher than the Union average in 1993 was only just about 20% above the average in PPS terms. In ECU terms, the USA had a per capita GDP a good one-third higher than the Union average for 1993, but in PPS terms it was almost 50% higher. Although at the top of the Union table, Luxembourg was overtaken by the United States in 1993 by around 9% in PPS terms, whereas Japan was trailing Luxembourg by around 13%.

Table 3: National accounts figures, Germany 1991-1993
at current prices and exchange rates

EU eurostat	Germany			old Länder			new Länder					
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
	National accounts aggregates, ECU billion									% of Germany		
Gross value added	1334.5	1458.5	1561.1	1240.2	1337.6	1414.3	94.3	120.9	146.8	7.1	8.3	9.4
Agriculture, forestry, fishing	17.7	18.1	17.0	16.5	16.3	15.1	1.2	1.8	1.9	6.9	9.8	11.2
Manufacturing industries	524.2	557.8	566.3	490.5	515.6	514.3	33.8	42.2	52.1	6.4	7.6	9.2
Market services	606.3	675.6	750.7	569.5	627.6	692.2	36.7	48.0	58.6	6.1	7.1	7.8
Non-market services	186.3	207.0	227.0	163.7	178.0	192.7	22.6	29.0	34.3	12.1	14.0	15.1
Gross Domestic Product	1373.1	1498.6	1604.8	1284.9	1383.1	1462.5	88.2	115.5	142.3	6.4	7.7	8.9
Gross National Product	1386.7	1506.7	1604.4	1294.0	1385.3	1456.3	92.7	121.4	148.1	6.7	8.1	9.2
Domestic final consumption	1374.4	1500.1	1598.4	1202.6	1286.7	1346.4	171.8	213.4	252.0	12.5	14.2	15.8
Private consumption	784.0	852.3	925.8	696.5	747.4	805.9	87.5	104.9	120.0	11.2	12.3	13.0
General government consumption	269.2	300.2	321.5	227.5	247.8	261.5	41.7	52.4	60.1	15.5	17.4	18.7
Gross fixed capital formation	318.0	351.0	364.5	275.5	293.8	292.6	42.5	57.2	71.9	13.4	16.3	19.7
Changes in stocks	3.3	-3.5	-13.4	3.2	-2.3	-13.5	0.0	-1.2	0.1	x	x	x
Export/ import balance a)	-1.3	-1.5	6.4	82.3	96.3	116.1	-83.6	-97.8	-109.7	x	x	x
Disposable income of private households	899.3	978.3	1053.8	804.8	857.4	918.5	94.5	120.9	135.3	10.5	12.4	12.8
Saving of private households	115.4	125.9	128.0	108.4	110.0	112.6	7.1	15.9	15.4	6.1	12.7	12.0
	Population and employment, 1000											
Population	79984	80595	81193	64074	64865	65539	15910	15730	15654	19.9	19.5	19.3
Active population	39104	38828	38554	30682	30949	30922	8422	7879	7632	21.5	20.3	19.8
Unemployed	2602	2978	3419	1689	1808	2270	913	1170	1149	35.1	39.3	33.6
Persons employed (domestic concept)	36446	35831	35142	29227	29487	29014	7219	6344	6128	19.8	17.7	17.4
Employed wage and salary earners (domestic concept)	33040	32365	31651	26183	26432	25968	6857	5933	5683	20.8	18.3	18.0
	Per capita data (ECU) and ratios (%)									% of old Länder		
Per capita Gross National Product	17300	18700	19800	20200	21400	22200	5800	7700	9500	28.8	36.1	42.6
Gross Domestic Product per person employed	37700	41800	45700	44000	46900	50400	12200	18200	23200	27.8	38.8	46.1
Per capita private consumption	9800	10600	11400	10900	11500	12300	5500	6700	7700	50.6	57.9	62.3
Per capita general government consumption	3400	3700	4000	3600	3800	4000	2600	3300	3800	73.9	87.2	96.2
Gross fixed capital formation per person employed	8700	9800	10400	9400	10000	10100	5900	9000	11700	62.5	90.5	116.3
Average monthly total gross wages and salaries per employee	1610	1800	1960	1810	1940	2080	890	1220	1440	49.1	63.0	69.4
Unemployment rate b)	6.7	7.7	8.9	5.5	5.8	7.3	10.8	14.8	15.1	196.9	254.2	205.1
Saving ratio c)	12.8	12.9	12.1	13.5	12.8	12.3	7.5	13.2	11.4	55.6	102.8	92.8

Source: Eurostat calculations on the basis of source indicated in footnote 1

a) including transactions between old and new Länder

b) Unemployed persons as a percentage of active population

c) Saving of private households as a percentage of disposable income of private households

Changes in levels and structures between the old and the new Länder

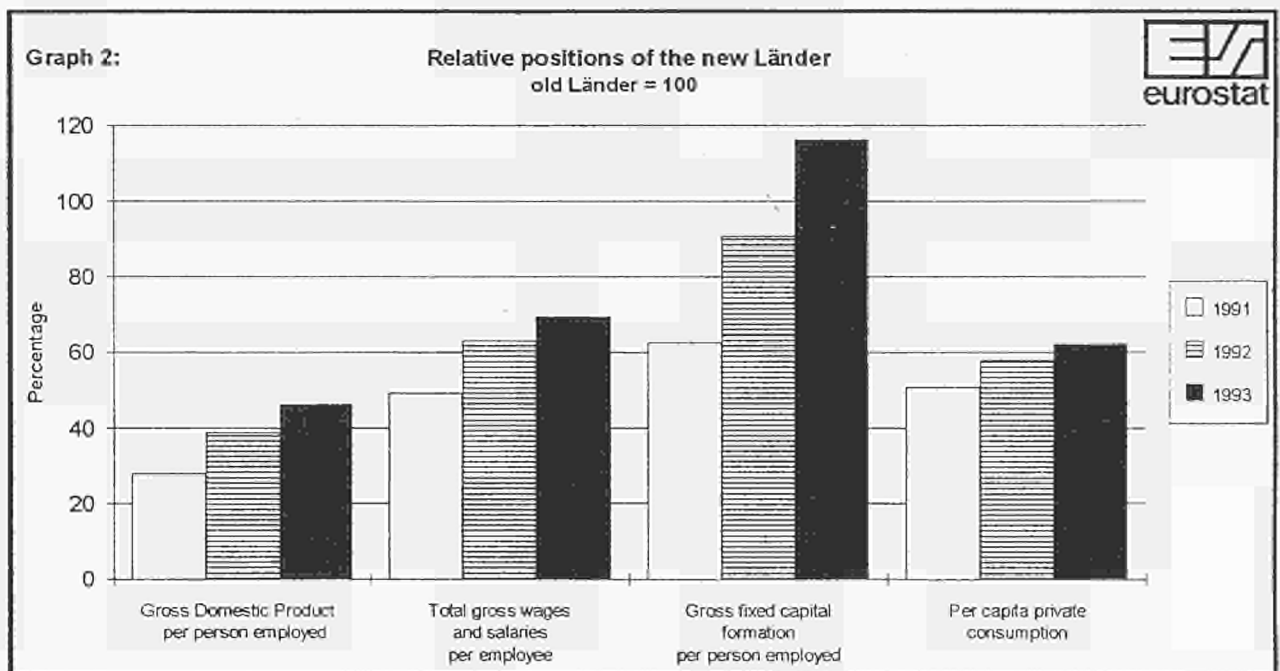
Generation of GDP

Around 19% of the total population of Germany and some 20% of the economically active population are resident in the new Länder, but they accounted for only 6.4% of Germany's GDP in 1991 (Table 3). Despite the marked improvement, to 7.7% in 1992 and 8.9% in 1993, it is still low in relation to the percentage of the total working population living in the East.

This is reflected directly in the level of **labour productivity** (GDP per person gainfully employed). In 1991, labour productivity in the new Länder was less than one third of the level in the former Federal Republic. In 1992, the figure was up to just under 39% of the Western level and by 1993 it had climbed to 46.1% (Table 3, Graph 2). Any assessment of labour productivity in the new Länder has to take into account the

fact that national accounts normally show per capita productivity, which has been increasing at a higher rate than productivity per hour, largely because, since the middle of 1990, there have been enormous changes in the number of hours worked each year in the Eastern part of Germany, primarily due to a loss of working time through short-time working.

The impact of this short-time working is gradually waning, however, since in the meantime the high East German figures have been falling to Western levels. That is why the increase of per capita productivity in the Eastern part of Germany is increasingly due to factors other than the fall in (above-average) short-time working caused by job losses, as was mainly the case up to 1992.



A glance at the **structure of gross value added in the four main branches** shows that in 1993 there were still substantial structural differences between Eastern and Western Germany on the generation side of GDP, even though the differences were becoming less marked (Table 4, Graph 3).

However, in a few branches in the new Länder gross value added is still not valued in the same way as in

the old Länder owing to persistent differences in prices, wage rates and systems. These are bigger than regional differences normally in a uniform economic area would be. Thus, for example, because housing rents and in some cases transport costs and the prices of services are still lower, gross value added in the relevant branches in the new Länder still tends to be undervalued, although in nominal terms the valuation differences are declining over time.

Table 4:

National accounts for Germany, 1991-1993: structural data at current prices and exchange rates

eurostat	Germany			old Länder			new Länder		
	1991	1992	1993	1991	1992	1993	1991	1992	1993
	% of gross value added								
Agriculture, forestry, fishing	1.3	1.2	1.1	1.3	1.2	1.1	1.3	1.5	1.3
Manufacturing industries	39.3	38.2	36.3	39.5	38.5	36.4	35.8	34.9	35.5
Market services	45.4	46.3	48.1	45.9	46.9	48.9	38.9	39.7	39.9
Non-market services	14.0	14.2	14.5	13.2	13.3	13.6	23.9	24.0	23.4
	% of final domestic consumption								
Private consumption	57.0	56.8	57.9	57.9	58.1	59.9	50.9	49.2	47.6
General government consumption	19.6	20.0	20.1	18.9	19.3	19.4	24.3	24.5	23.8
Gross fixed capital formation	23.1	23.4	22.8	22.9	22.8	21.7	24.8	26.8	28.5

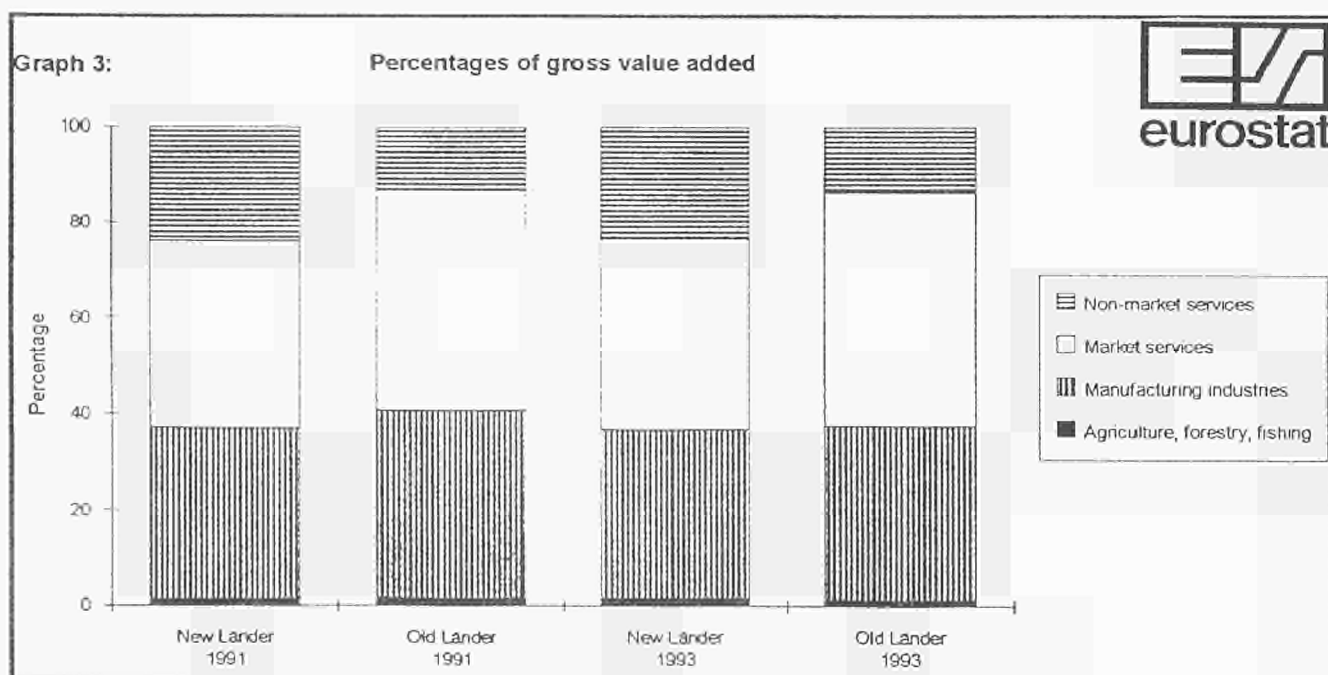
Source: see note 1)

Structural comparisons between the two parts of Germany should not be made in real terms until there are no substantial price or wage rate differences remaining, which is unlikely to be before the changeover to 1995 as the base year for prices.

Table 4 and Graph 3 show that in 1991 there were still substantial structural differences between the two parts of Germany. Thus the percentage of gross value added accounted for by the manufacturing industries in the new Länder was 3.7 points lower and the share of

market services 7 points lower than in the old Länder. On the other hand, the non-market services share was 10.7 percentage points higher in the East.

By 1993, generation-side structures were increasingly resembling those in the West, with significant percentage differences only between market and non-market services. The former accounted for 9 percentage points less of gross value added in the new Länder than in the old and the latter for 9.8 percentage points more.



There are two main reasons for the **comparatively high percentage of gross value added accounted for by non-market services** in the new Länder.

On the one hand, in the new Länder there are, relatively speaking, many more municipalities ("Gemeinden") with correspondingly more staff than in the West of Germany, since regional reforms have only recently begun in the East. Since value added in the general government sector is in direct proportion to the number of employees, non-market services are higher in the East than in the old Länder, but this is to some extent offset by the East's lower wage levels. The high percentage of non-market services also ties in with a certain weakness in market services in this area, for which there are four main reasons:

Firstly, many market services (e.g. the transport of goods, business advisory services and advertising) correlate closely with changes in output. These services will increase in the Eastern part of Germany as the manufacturing industries show stable growth rates once the friction caused by the adjustment process has been overcome;

Secondly, in the GDR there were virtually no services such as banking and insurance, consultancy services or self-employed architects. After currency union, there was a boom in such services, followed by a moderate growth rate which met much of the backlog demand but has still not fully closed the gap to match the high

levels of the West. A further point is that certain of these services - a typical example would be insurance - are largely provided by the old Länder, and many of the data are therefore included with the market services of the West and not of the new Länder;

Thirdly, there is a much lower demand for certain services (such as hairdressing, dry cleaning, culture and sport) than in the old Länder. The most likely reason is the lower wage levels and higher unemployment in the East, which make for higher spending on other goods and services;

Fourthly and lastly, in the first years after unification it was not always clear whether services were market or non-market. These problems of allocation resulted from the East German system, and were not inconsiderable, although they have become less important over time. In contrast to the situation in the old Länder, in the GDR almost all doctors and dentists, for example, were employed by the State, and thus the services they provided are to be considered non-market. There has been a steady increase in the number of self-employed doctors in the new Länder since unification, but a larger proportion of health services is still provided by the general government sector in the East than in the West. In the new Länder, too, there are still a comparatively large number of publicly-run (and therefore non-market) educational and training establishments, such as kindergartens and adult education centres.

Use of Gross Domestic Product

The data on the use of GDP in the new Länder show that their contribution to the private consumption, general government consumption and capital expenditure of the country as a whole is larger than their share of total GDP might suggest (Table 1).

Per capita **private consumption**, which in 1991 had been running at a little over half of the Western level, had jumped to 62.3% of the value of the old Länder by 1993 (Graph 1). However, prices (housing rents, transport and services costs) were still adjusting in the new Länder and these adjustments were reflected, in private consumption in particular, in rapidly rising living costs.

In 1993, per capita **general government consumption**, at 96.2%, was still somewhat below the level of the old Länder. The corresponding value for 1991 had been just under 74%. This increase is mainly due to the gradually catching up of the salaries in the state sector in the new Länder with that in the west.

Changes which will have a major impact on the prospects for growth in the new Länder would seem to be on the horizon as regards **gross fixed capital formation** per person gainfully employed. In 1991, the East German level had been over one third below the West German and in 1992 just under 10% below, but by 1993 it was over 16% higher than the per capita ratio in the West.

Publications by the Statistisches Bundesamt in 1993 show that in the new Länder the share of capital expenditure on machinery and equipment accounted for by general government was (by one percentage point) higher than the share accounted for by the corporate sector and, even more noticeably, the share of capital expenditure on new construction was higher (by five percentage points). 2) The reason is the comparatively high level of government investment in infrastructure in the East of the country, which in turn is vital if the new Länder are to become attractive to private investors.

2) see note 1)

A similarly striking feature of the change in the **structure of domestic final consumption** in East Germany, compared with the structure in the old Länder, is the unusually rapid growth in investment. The widening gap in the share of domestic final consumption accounted for by private consumption (in 1991, it was 7 percentage points and in 1993 12 percentage points lower in the new than in the old Länder) is attributable mainly to the increase in the proportion accounted for by East German gross fixed capital formation.

The share of final domestic uses accounted for by investment had been just under two percentage points higher in the East of Germany in 1991 but by 1993 it was almost 7 percentage points above the corresponding value in the West. The ratios of general

government consumption, however, hardly changed (Table 2).

A further revealing point of comparison between the old and the new Länder is the difference between **exports and imports**. In each of the three years in question, there was a marked import surplus in the new Länder (Table 1). Considered in relation to final domestic uses, this means that in 1991 the output of the new Länder fell short of home demand to the tune of almost 49%, and, even though the coverage rate has been increasing steadily, the shortfall was almost 46% in 1992 and 43.5% in 1993. Goods and services imported into the new Länder come predominantly from the old Länder, and this is reflected in the large export surplus of the latter in all three years.

Employment, income and saving

As Table 1 shows, the labour market situation in the East of Germany was still much worse in 1993 than in the old Länder. In 1991, the **unemployment rate** in the new Länder was just under twice as high as in the West. In 1992, it was two and a half times as high.

The main reason was the expiry of certain transitional provisions governing the East German labour market, so that at the start of 1992 many workers who had been on short time were dismissed and became unemployed. In 1993, the East German labour market recovered somewhat, and the unemployment rate declined, even though it was still over twice as high as in the old Länder.

Movements in average monthly total **gross wages and salaries** per employee show that incomes in Eastern Germany were adapting to Western levels more quickly than productivity (Table 1, Graph 2). In 1991, an employee in the East received on average just under 50% of the remuneration of an employee in the West. By 1992, the equivalent figure was 63% and in 1993 just under 70%.

There are two main factors which have to be taken into

account when **saving ratios** (the saving of private households in relation to their disposable income) in the two parts of Germany are compared. On the one hand, incomes are still very much lower in the new Länder, pensions are still lower and unemployment is much higher. This is particularly relevant when prices in the East are catching up with Western prices more quickly than income. Secondly, the saving ratio in new Länder reflects the purchasing patterns of East German citizens during the various phases of unification. Immediately after unification, their main purchases were technical consumer goods, furniture and motor vehicles (to catch up with Western levels of ownership).

As a consequence of both these factors, the 1991 East German saving ratio was only 55.6% of the West German level (Table 3). Since 1992, the process of acquiring durable consumer goods has gradually come to the end of its natural life and a more cautious pattern of buying has developed, partly as a result of anxiety about steeply rising levels of unemployment. In 1992, therefore, the saving ratio in the new Länder was slightly above Western levels. In 1993, it was down again to something over 7 percentage points lower.