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## Highlights in this issue:

- Germany's transfers to the East amounted to over €1 trillion
- Annual transfers of €80 billion are 30% of eastern and 4½% of western GDP
- Most transfers are social benefits

## Transfers to Germany's eastern Länder: a necessary price for convergence or a permanent drag?

By Heinz Jansen\*

### Introduction

Since unification, support to the former East Germany has totalled upwards of €1.2 trillion. Public and private net payments of over €80 billion annually (some 4% of GDP) for over a decade have periodically spawned debate on the quality and quantity of the transfers. There is particular concern that the massive transfers represent a substantial drag on the West's economy while creating a benefit-dependency trap in the East's labour market that makes its convergence painfully slow.

Although outward transfers are slowly falling in volume, they still represent 4½% of western GNP, and up to 10% for some Länder when intra-western transfers are included. On the receiving side, they make up about one third of GNP in the former GDR. Most of the transfers are channelled through the social security systems in the form of pensions and unemployment benefits. Unless convergence accelerates sharply, transfer volumes will decline only slowly.

### East-West convergence

The post-unification period was not good in economic terms for western Germany, where per capita GNP rose by a mere 6.7% in the twelve years from 1991 to 2003 (Table 1).<sup>1</sup> Its economic crisis therefore started well before the bursting of the 2000 technology bubble. Indeed it took until 1998 for the West to regain the real GNP level it had in 1991. After the 1999/2000 boom, stagnation took hold.

Figures look especially bleak for the Berlin Land, where real per capita GNP is at practically the same level as twelve years ago. Figures look less bad for the other Eastern Länder, where over the same period GNP per capita has increased by between 44% in Brandenburg and 57% in Saxony. These figures also imply significant convergence between East and West. Eastern per capita GNP (including Berlin) was less than 53% that of the West in 1991. It is now over 68%; if Berlin is excluded, the difference is slightly larger, with the East achieving something more than 66% of Western GNP per capita.

While convergence was very impressive until 1996, the nominal convergence of 1½ percentage points since then can be attributed exclusively to demographic developments, mostly westward worker migration. Since 1991, the population in the five new Länder has shrunk by 1 million (more than 7%), while that of the West has increased by 3½ million (6%). There is a fairly constant difference between western

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and eastern population growth of one percentage point annually. Demographics of course pose a problem in their own right.

**Table 1: Real GNP per inhabitant (Germany in 1991 set as 100)**

	Germany	Total West	Berlin	Brandenburg	Mecklenburg-W. Pomerania	Saxony	Saxony-Anhalt	Thuringia	Total East + Berlin	East as % of West
1991	100.0	112.1	91.0	56.8	51.3	50.8	50.6	52.1	59.1	52.7%
1993	99.5	109.5	91.9	61.3	57.0	56.1	55.7	55.6	63.8	58.2%
1995	102.0	110.4	93.7	70.1	67.2	65.7	63.8	63.8	71.4	64.7%
1997	103.7	111.8	93.7	73.7	68.8	69.3	67.0	67.4	74.1	66.2%
1999	107.7	115.8	94.7	77.0	72.7	72.6	71.0	72.6	77.3	66.8%
2001	111.7	119.9	94.3	80.7	75.4	76.7	74.0	77.0	80.3	66.9%
2003	111.9	119.6	92.4	81.8	76.4	80.0	77.2	79.5	81.9	68.4%

Source: Destatis, own calculations

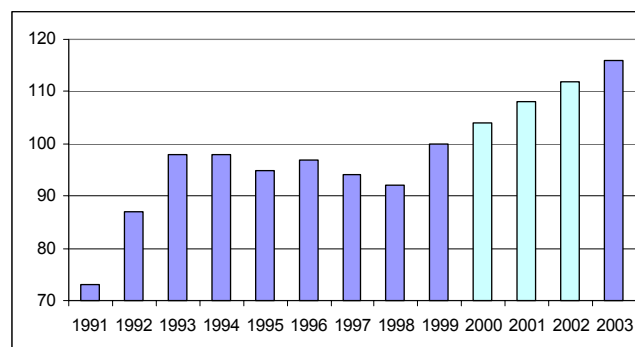
Plenty of transfer instruments

### Over one trillion euros in transfers to the East so far

Linked to the convergence process is the intra-German transfer mechanism. The large number of transfer schemes, be they the obvious instruments of the *Länderfinanzausgleich*, direct budgetary supports or transfers via the social security systems, make it difficult to put a precise figure on the transfer of funds to the East. Since 1999 no official figures have been published. For 2003, J. Ragnitz of the Institut für Wirtschaftsforschung in Halle (IWH) puts the gross transfers at €116 billion, using a bottom-up approach, i.e. by adding individual components (Chart 1). These figures show a steady increase in gross transfers in recent years. The total transfer sum so far has recently been contested. While Ragnitz (2004) puts the figure for gross transfers at €1.25 trillion (€950 billion net) for 1991-2003, K. Schroeder (2004) of the Free University of Berlin arrives at a total of €1.5 trillion.

A lot of money!

**Chart 1: Gross transfers into the new Länder in billion Euros**



Source: 1991-1999 Federal government (no official estimates are available since); 2003 Ragnitz (IWH)

This note follows an alternative calculation using regional accounts statistics (see Box). Tables 2 and 3 show the net transfers in both absolute and relative terms. The numbers lead to several conclusions.

...due to structural rigidities

### Box: Calculation of transfer volumes

A conventional approach for calculating transfers for an individual Land (L) consists of the exhaustive summation of all individual transfer instruments. Net transfers are then calculated by subtracting the Land's federal tax and social security contributions.

$$\text{net transfers}_L = \text{gross transfers}_L - \text{national taxes}_L - \text{social security contributions}_L$$

Unfortunately, the transfer volumes of individual instruments can rarely be precisely allocated to individual Länder. However, regional national accounts statistics allow the calculation of the difference between regional absorption and regional GNP figures.

$$\text{absorption}_L = \text{consumption (private + public)}_L + \text{investment}_L$$

Net transfers can then be calculated as the difference between regional GNP and absorption.

$$\text{net transfers}_L = \text{GNP}_L - \text{absorption}_L - \text{correction factor}_L$$

The purpose of the correction factor is to sum the total intra-German transfers to zero by filtering out the overall German net exports, stock building and net factor incomes from the rest of the world, for which no regional statistics are available. The correction factor simply allocates these sums to all Länder in proportion to their GDP.

$$\text{correction factor}_L = \frac{\text{net exports} + \text{stock building} + \text{net external transfers}}{\text{GNP share of Land}_L}$$

Table 2: Estimated net transfer of individual German Länder in billion euros

	Baden-Württemberg	Bavaria	Bremen	Hamburg	Hesse	Lower saxony	North Rhine-Westphalia	Rhine-Palatinate	Saarland	Schleswig-Holstein	Total West	Berlin	Brandenburg	Mecklenburg-W. Pomerania	Saxony	Saxony-Anhalt	Thuringia	Total East + Berlin
1991	-18.7	-11.2	-0.7	-3.1	-12.5	-0.3	-22.7	-3.8	0.3	-3.1	-75.8	8.1	10.5	9.3	22.8	13.0	12.1	75.8
1992	-21.2	-14.8	-0.9	-2.8	-13.9	-2.5	-24.8	-4.9	0.4	-3.2	-88.4	8.2	11.9	12.1	23.7	17.3	15.1	88.4
1993	-21.3	-22.1	-0.4	-3.0	-15.1	-4.3	-29.4	-4.5	0.2	-3.6	-103.7	8.2	16.1	14.1	26.2	20.6	18.5	103.7
1994	-25.0	-21.6	-0.9	-4.7	-19.0	-4.9	-30.9	-3.9	0.3	-3.6	-114.3	7.0	18.3	14.6	32.2	22.5	19.8	114.3
1995	-27.2	-22.5	-0.7	-5.5	-17.5	-4.9	-31.3	-3.1	0.6	-2.9	-115.0	8.3	16.9	14.3	34.1	22.7	18.6	115.0
1996	-26.9	-22.2	-0.3	-5.5	-19.6	-5.3	-26.4	-3.6	1.1	-3.2	-111.7	10.8	18.0	13.5	33.8	20.3	15.4	111.7
1997	-28.3	-25.4	-0.3	-4.9	-18.2	-3.2	-25.8	-2.5	1.0	-2.6	-110.3	13.9	17.1	12.5	31.8	19.4	15.5	110.3
1998	-29.2	-23.4	-0.2	-4.7	-18.0	-1.9	-22.0	-1.8	1.9	-1.7	-101.0	9.5	16.8	11.8	29.3	19.0	14.7	101.0
1999	-29.4	-25.0	0.1	-6.2	-18.7	0.6	-16.4	-1.3	1.6	-1.3	-95.9	8.9	16.3	10.9	27.4	17.3	15.2	95.9
2000	-29.0	-22.6	0.3	-5.2	-20.6	1.3	-12.9	-1.1	1.4	-1.6	-89.8	8.0	14.7	10.3	26.9	16.4	13.6	89.8
2001	-27.5	-23.0	0.3	-4.0	-18.4	2.2	-12.3	-0.8	1.3	-1.5	-83.6	8.8	13.9	10.0	23.3	14.6	13.1	83.6
2002	-27.8	-23.7	0.4	-4.3	-17.8	2.4	-11.3	-0.9	1.1	-1.1	-83.0	9.6	13.5	9.9	22.9	14.3	12.8	83.0

Source: Destatis, own calculations

- The transfer volumes derived are fairly close to those of the IWH. It is also clear that net transfers of still over €80 billion annually are far from negligible for both receiving and paying areas. However, the method does not permit a calculation of what part of the transfers is respectively government-imposed or voluntary, e.g. a Westerner investing in Eastern real estate. But it is safe to assume that western investments in the East are significantly induced by a high subsidy level (notably for housing). Moreover, net investment flows appear relatively limited compared with the overall transfer volumes.

...but are still nearly one third of Eastern GNP

- While the gross transfers reported by the IWH are apparently still increasing, net transfers to the East have been gradually falling since 1995. The method described above does not provide a disaggregation, which would allow the underlying factors for this to be determined. One may suppose, however, that the reduction in (subsidised) construction activity in the East has been a major element in this decline, along with a gradual increase in taxes paid by Easterners.

Net transfers peaked in the mid 1990s...

- More rapid than the absolute fall in transfers is the relative fall in the East. Thanks mostly to strong growth, transfers as a percentage of GNP in the new Länder (excluding Berlin) fell from around 60% in most Eastern Länder in the early nineties to the most recent values of below one third. Despite significant fluctuations over the years, Berlin's share stayed fairly constant over the same period, in the low teens.

- For the five New Länder the transfer shares in 2002 remained in the narrow range of 27 to 32% of GNP, with wealthier Brandenburg (which contains the fast-growing outskirts of Berlin) and Saxony at the low end and poor Mecklenburg-Western Pomerania at the top end. Berlin received some 13% of GNP in net transfers, reflecting the fact that about one third of the city was part of the former GDR.

**Table 3: Estimated net transfer of individual German Länder as percent of GNP**

	Baden-Württemberg	Bavaria	Bremen	Hamburg	Hesse	Lower Saxony	North Rhine Westphalia	Rhineland Palatinate	Saarland	Schleswig-Holstein	Total West	Berlin	Brandenburg	Mecklenburg-W.Pomerania	Saxony	Saxony-Anhalt	Thuringia	Total East + Berlin
1991	-8.2	-4.4	-4.1	-7.1	-9.6	-0.2	-6.2	-5.0	1.4	-5.8	-5.7	14.2	45.6	60.4	59.8	57.8	58.2	42.8
1992	-8.8	-5.4	-5.0	-6.1	-10.1	-1.6	-6.4	-6.1	2.1	-5.6	-6.3	13.2	42.0	63.9	51.0	63.2	60.1	42.4
1993	-8.8	-8.0	-2.4	-6.6	-10.8	-2.7	-7.5	-5.5	0.9	-6.3	-7.3	12.4	50.8	65.8	49.7	65.5	64.8	44.8
1994	-10.1	-7.5	-5.5	-9.9	-13.2	-3.0	-7.7	-4.6	1.6	-6.1	-7.7	10.3	52.1	61.0	54.8	64.6	61.9	45.3
1995	-10.6	-7.6	-4.0	-11.4	-11.7	-2.9	-7.6	-3.5	2.6	-4.8	-7.6	11.8	44.3	54.1	52.7	60.1	54.1	42.3
1996	-10.3	-7.3	-1.6	-11.1	-12.9	-3.1	-6.3	-4.0	5.2	-5.1	-7.2	15.1	44.6	50.1	49.6	51.6	42.7	39.6
1997	-10.6	-8.2	-1.7	-9.6	-11.8	-1.9	-6.0	-2.8	4.6	-4.1	-7.0	19.7	41.6	46.0	46.1	48.7	42.3	38.8
1998	-10.5	-7.3	-1.1	-8.9	-11.3	-1.1	-5.0	-1.9	8.2	-2.6	-6.2	13.3	39.4	42.2	41.6	46.7	38.4	34.7
1999	-10.3	-7.6	0.7	-11.5	-11.4	0.3	-3.7	-1.3	6.9	-2.0	-5.8	12.4	36.9	37.6	37.7	41.1	38.1	32.0
2000	-9.8	-6.6	1.5	-9.3	-12.3	0.7	-2.8	-1.1	5.9	-2.3	-5.2	11.0	32.1	34.6	36.2	38.6	33.0	29.4
2001	-9.0	-6.6	1.8	-7.1	-10.7	1.2	-2.6	-0.8	5.1	-2.1	-4.8	12.1	29.5	33.2	30.7	33.5	31.0	26.9
2002	-9.0	-6.7	2.3	-7.4	-10.1	1.3	-2.4	-0.9	4.4	-1.6	-4.6	13.0	27.8	32.2	29.3	31.9	29.4	26.0

Source: Destatis, own calculations

*A heavy burden on the West ...*

- While net transfers to the East make up some 4½% of the West's overall GDP, there is a significant regional variation because of the impact of intra-western transfers. For example, even the Saarland receives a significant transfer of around 4.4%. Bremen and Lower Saxony are also net recipients. This increases the burden on the remaining Länder. Hesse's net burden is an astonishing 10% of GNP; Baden-Württemberg's is 9%.

*... is placed on fewer shoulders*

- Nevertheless, with a present level of net transfers of 4.6% of western GNP, the relative burden of transfers has come down substantially from the peak of 7.7% in the mid-nineties. Here, there are also large differences among Western Länder. Broadly, the lowest relief has accrued to those Länder which had the highest burden to begin with, while those starting from a lower net burden improved their net transfer situation over-proportionally. Increasingly the transfer system is financed by Hesse, Baden-Württemberg and Bavaria, whose absolute net transfers stayed practically unchanged over nearly a decade, while transfers from, say, North Rhine-Westphalia dropped by two thirds from over €30 billion to €11 million annually.

### **Was the money well spent?**

Recent convergence is higher than the raw figures of Table 1 suggest, because relatively fast eastern manufacturing growth has been counterbalanced by a rapid decline in the oversized construction sector and a shrinking public sector (cp. Federal Ministry of Transport and Infrastructure, 2004). Nevertheless, in the light of the magnitude of transfers one would have expected a substantial output boom and employment growth in the East. The fact that this did not happen appears to be the result of three factors likened to the situation of the Italian Mezzogiorno (Kröger/Teutemann 1992; Sinn/Westermann 2000).

First, most of the transfers are actually spent on consumption. As Table 4 shows, welfare, notably spending on unemployment benefits and pensions, makes up the bulk of the transfers (45%). Net transfers via unemployment insurance alone amount to €12.5 billion annually (Koller et al. 2003). The second largest spending position (21%) consists of untied assistance to the Länder as part of the intra-German transfer mechanism that compensates Länder with weak tax revenues. By comparison barely 20% of the transfers are spent on public investment (13%) and support to companies (9%).

**Table 4: Transfers to the New Länder (incl. East Berlin) in 2003**

	in billion €	in % of total
Gross transfers total	116	100
of which:		
Economic development	10	9
Social benefits	52	45
Infrastructure	15	13
Budgetary assistance to Eastern Länder	24	21
Other	14	12
Federal tax revenues in East Germany	33	
Net transfers	83	

Source: Ragnitz, IWH-Pressemitteilung 21/2003

*Most of the transfers are social benefits...*

Second, capital invested in the East is (perhaps unavoidably) substantially less productive and profitable than in the West (Schalk & Untiedt 2000). Numerous failed investments illustrate this. In addition, an over-proportional share of investment goes into capital-intensive sectors, such as the chemicals, automotive and micro-electronic sectors, resulting in relatively little value added and employment creation per unit of subsidy. However, even when controlling for the composition of the industry, capital endowment in many sectors exceeds that of the West (Klodt 2000).

*...or are rendered  
ineffective by the  
labour market*

*...or promote  
capital-intensive  
development*

Third, employment growth suffers from labour market constraints. Two elements other than regulatory rigidities play a role. One is that rapid wage convergence with the West and the adoption of western regulations, combined with low productivity, hit much of the eastern economy hard in the early nineties (cp. Sinn/Westermann 2000). The public sector clearly took over wage leadership, paying by far the highest relative wages. Also, setting welfare and unemployment benefits at western levels meant that the reservation wage in the East was high compared with relatively low regional costs of living. For certain socio-economic groups, welfare payments are even higher than average net wages. Finally, high investment subsidies allowed workers to capture a substantial share of the economic rent in the form of higher wages.

The consequences of these mechanisms have been described in detail in a study by the European Commission (2002). Persistently large transfers have contributed to Germany's difficulties in meeting the Stability and Growth Pact requirements. At the same time they create benefit dependency among the Eastern recipients. They are thus an important factor in explaining the economic underperformance of Germany in the last decade.



## **Future outlook**

*Transfers will  
come down but  
are to stay high*

There are several reasons why transfers will gradually fall over the coming years. One aspect is that the Solidarpakt II (with an overall volume of €156 billion) foresees a gradual phase-out of special eastern subsidies by 2019, though this affects only a fraction of the overall transfers. More relevant is that most of the gaps in the capital stock have actually been closed, reducing the direct need for transfers. Furthermore, the harmful effect of high wages has diminished. As wage convergence has come to a halt (not least because unions have lost their power in the face of high unemployment), vulnerable companies have been driven out of business and, in the remaining companies, wage increases remain below productivity increases. Only 10% of East German companies and 30% of employees are covered by collectively negotiated wages, and even this figure is rapidly falling (Brenke 2004). Recent reforms also reduce transfer volumes directly by reducing welfare payments. They should also lead to greater labour market flexibility and higher employment. The net effects of the continuing westward migration are more difficult to gauge. On the one hand, it relieves the Eastern labour market. On the other hand, it increases the relative share of Eastern transfer recipients, because it is mostly workers that move.

However, even though the Eastern construction sector should stop shrinking, most analysts agree that no boom can imminently be expected in the East. And, as a significant part of the payments cannot be greatly changed (e.g. for pensions, which only gradually begin to reflect post-unification employment histories), large transfers are set to stay for a long time to come.



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<sup>1</sup> Due to considerable cross-regional flows of workers the analysis here focuses on GNP rather than the customary GDP figures. The use of GDP figures would not only lead to considerably distorted figures for individual Länder such as Hamburg, where 25% of GDP is earned by non-residents. It also has a sizable influence on East Germany as a whole due to the net worker flows of some 400 000 (6½% employment) (DIW et al. 2003), notably to the Berlin Land and bordering regions of West Germany.

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