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Ullrich Heilemann\*

## The Economics of German Unification Reconsidered

*The task of vitalizing the east German economy was severely underestimated – by politicians as well as by both the academic and the business community. Despite all the encouraging signs in east Germany, which undeniably exist, the process will take more time, require more money, and need more east German commitment than had widely been expected. But will fiscal backing alone be enough to vitalize the east German economy? What are the tasks ahead? Are they being tackled in an adequate way?*

It is still very early to make any judgments about the outcome of east Germany's vitalization process or the effectiveness of the various policies under way.<sup>1</sup> Caution is suggested, not only because of missing data. Far more important, as we are only slowly beginning to realize, is that a complete reorientation of nearly every part of society in east Germany needs more time than the normal twelve to fifteen months of slowing down and catching up around the nadir of the business cycle characteristic of Western economies. In addition, it is true that a number of massive public expenditure programmes and investment incentives are under way (though their multiplier effects will be diminished by the still high propensity to "import"). But even under the conditions which were normal in the old Federal Republic, six months or more would usually pass until the intended reactions to such measures would be felt.

This paper is thus restricted to a review of events and the reactions they have caused, and is not yet an analysis of the process they might have started. For a number of reasons it has to be a rather selective review. Neither the policy of the Treuhandanstalt and its results,<sup>2</sup> nor the fiscal policies of the Länder or of the local communities in east Germany will be addressed. Nor will monetary policy. What could be said about the states' and the local communities' fiscal policies would not be too different from what will be said here about fiscal policy in general. And monetary policy (interest rates, exchange rates), though of much more importance for east Germany than often

realized, will be constrained by the expansionary fiscal policy (as described by the Mundell-Fleming model) and does not seem to have much chance of responding to specific east German needs.

The paper abstains from discussing the present short or long-term forecasts for east or west Germany. Forecasts of the medium or long-term development of the former GDR are rare and differ widely. For example, Verkade or Barro and Sala-i-Martin<sup>3</sup> expect a rather long, drawn-out process of catching up with west Germany. Verkade predicts that, despite a continuation of considerable west German transfers (DM 140 billion per year), a 20 per cent increase in compensation per employee per year, and an annual 8 per cent increase in productivity, the number of east German jobs will fall below 5 million by 1995. Barro and Sala-i-Martin calculate that in 35 years half the income gap would be overcome. A more favourable outlook, at least as far as employment is concerned, is offered by McKibbin:<sup>4</sup> by 1996, 60 per cent of the east German labour force would be employed; the remaining 40 per cent, however, would have to wait until the end of the first decade of the next century.

<sup>1</sup> A chronology of the main political events and of the various economic policies is available from the author.

<sup>2</sup> Cf. for example G. A. Akerlof, A. K. Rose, J. L. Yellen, H. Henssenius: East Germany in from the Cold: The Economic Aftermath of Currency Union, in: *Brookings Papers on Economic Activity*, 1991, No. 1, pp. 65 ff. In September 1991 the Treuhandanstalt owned and administrated about 8,100 companies with about 2.100 million employees. A short report on the Treuhand activities during its first year is given in: *The Economist*, September 14, 1991, pp. 21 ff.

<sup>3</sup> Cf. E. M. Verkade: Restructuring the East-German economy – some model results, Central Planning Bureau – Research Memorandum, No. 80, The Hague 1991; R. J. Barro, X. Sala-i-Martin: Convergence across States and Regions, in: *Brookings Papers on Economic Activity*, 1991, No. 1, pp. 107-158.

<sup>4</sup> Cf. W. McKibbin: *The New Europe and its Economic Implications for the World Economy*, Washington, D. C., June 1991.

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As useful as such calculations are in a cloudy situation like the present one, scanty data, simply specified theories or models which have hardly been tested *ex ante*, make them very vulnerable. It appears very doubtful whether any model in 1949 for West Germany would have been able to predict the West German growth potential.

### Complexity and Contradiction

In the first months of 1990 when the discussion of the economics of German unification started, the situation and the task to be undertaken were unanimously described as being without any precedent in history.<sup>5</sup> Whether history bears any lessons to be drawn upon is a question still unsettled because every problem is made up of a number of other problems embedded in rather special conditions. Therefore to understand the proper nature of the economic problems of German unification at least five major problems can be distinguished:

- integrating the east German economy into the west German (and world) economy,
- vitalizing the east German economy,
- liberalizing the economy,
- massively and suddenly shifting public preferences, and
- compensating for property losses suffered since the 1930s.

Looking at German unification in this way illustrates the complex character of the situation compared, for instance, with the newly liberalizing countries in eastern Europe. But it also reveals that at least for each of these tasks some example might well exist. There have been enlargements of the "national" territory, attempts to revive the national economy, economic liberalizations, shifts in public preferences, and the need to compensate for losses of property dating back many years. The question is to what extent such examples could serve as guides for the present.

Regarding economic integration,<sup>6</sup> the German unification of 1871 might be seen as such an example. This

<sup>5</sup> For a timetable and a brief account of this discussion, see e. g. U. Heilemann: *The Economics of German Unification – A first Appraisal*, in: *Konjunkturpolitik*, Vol. 37, 1991, pp. 31 ff.; and, more generally, the account of the Minister of the Interior, who was in charge on the West German side during the negotiations on the Treaty of Unification: W. Schäuble: *Der Vertrag – Wie ich über die deutsche Einheit verhandelte*, Stuttgart 1991, pp. 25 ff.

<sup>6</sup> On this and the following cf. G. Lehmann: *Die improvisierte Vereinigung: Die dritte deutsche Republik*, in: *Leviathan*, Vol. 15, 1990, pp. 464 ff.; R. Tilly: *Wirtschaftshistorische Reflektionen über den deutschen Einigungsprozeß im 19. Jahrhundert*, Universität Münster-Telgter Diskussionsbeitrag, 1991, mimeo.

integration, however, started mainly from parts already largely integrated (Prussia and the *Norddeutscher Bund*). In addition, the differences between the states forming the *Deutsches Reich* were comparatively small, and the largest part, Prussia, contained greater economic inequalities than there were between the states. Finally, government and government regulations played only a minor role: the government's share of GNP was about 10 per cent, and military and general administration expenses accounted for about 70 per cent of government expenditures. The integration of the Saarland in 1957 – the "Anschluß" of Austria in 1938 is rarely discussed in this context – was the integration of an economy of 1 million citizens that despite the twelve-year French interregnum still had much in common with (West) Germany. Nevertheless, the Saarland was granted a two-year period for economic transition.

As to economic vitalization, there are not many successful examples despite its recent, often simplistic, identification with the introduction of a market economy. It may be natural to refer in this context to the "economic miracle" experienced by Germany after World War II.<sup>7</sup> It should, however, not be overlooked that this was also the result of a generally high demand for goods, low levels of individuals' expectations, undervalued currency, few opportunities to migrate, and especially the impact of the Marshall Plan, which gave not only financial assistance to the war-torn countries of Europe but opened the large US market to European exports.<sup>8</sup> These are factors that in the recent discussions of the problems of transition and catching up in the newly liberalizing countries in eastern Europe, perhaps with the exception of the agricultural sector, are usually ignored.<sup>9</sup>

Finding examples of sudden shifts in public preferences is more difficult, at least if one excludes the shifts from market economies to socialist economies as the most weighty expression of such changes. The implementation and application of, for instance, environmental policies in west Germany on a large scale started more than 15 years ago and, though rather piecemeal, was very much disputed.

<sup>7</sup> For a broader view, summarizing 40 years of economic development policy, see G. Ranis: *Global Perestroika*, Yale University 1990, mimeo.

<sup>8</sup> Cf. H. C. Wallich: *Mainsprings of German Revival*, New Haven 1955; W. Abelshäuser: *Die ordnungspolitische Epochenbedeutung der Weltwirtschaftskrise in Deutschland: Ein Beitrag zur Entstehungsgeschichte der Sozialen Marktwirtschaft*, in: D. Petzina (ed.): *Ordnungspolitische Weichenstellungen nach dem Zweiten Weltkrieg*, Schriften des Vereins für Socialpolitik, New Series 203, Berlin 1991, pp. 11 ff.

<sup>9</sup> Cf. e. g. J. Kornai: *The Road to a Free Economy*, New York 1991; U. Heilemann, *op. cit.*, pp. 144 ff.

The fewest difficulties with relying on past experiences might be posed by the question of compensation. The judicial, financial, administrative and practical restrictions were so strong that with a few, very important exemptions (compensation for property losses instead of property restitution if new investments would otherwise be hindered), the legal regulations established after World War II had to be applied.<sup>10</sup> Despite this, one million cases will keep the law courts busy for a number of years, and for certain types of cases the present regulations may not be final.<sup>11</sup>

### Uniqueness

Thus the uniqueness of German unification is twofold. First, while there have been examples for the various elements of the current situation, their circumstances have differed considerably. Second, what seems to be more important with respect to the situation today is the complexity, of this unification, i.e. the large number of different but closely related problems and tasks. Though, perhaps, all good things go together, this is not always the case in the short run. Dealing with most of these problems is, even in isolation, not easy, as the rather uneven regional distribution of prosperity in Europe and in the world, as well as the slowness of its convergence,<sup>12</sup> should remind us. So most of the unification-related policy problems and policy goals are in conflict with each other, at least in the short run, and in particular under the current conditions of limited resources.

What is true of the policy goals is also true of the instruments. Whether institutional arrangements, such as the establishing of a Ministry of Reconstruction, as sometimes requested by the GDR during the negotiations on the Treaty of Unification,<sup>13</sup> would have helped much here is hard to judge. At least some of the conflicts between

the various goals and policies would have become more evident.

The view of the nature of German unification presented here is not widely shared. Of course, occasionally the complexity, interdependence and trade-offs between certain tasks or goals were seen and made explicit, as when a rapid catching-up by east German living standards was considered harmful to economic vitalization, because abruptly higher wages would discourage investors or because the limited fiscal means could then not be used to improve the capital stock.<sup>14</sup> But in general, the conflictual nature of the tasks and the restrictions in resources and time under which they had to be solved were rarely realized. Hence, policy has hardly considered or developed any priorities as to the tasks mentioned. Economic difficulties such as rising unemployment, sluggish investment, insufficient Länder revenues etc. have to be settled by applying routine legal or administrative measures or, in exceptional cases, by postponing their application (see below). Given the

<sup>10</sup> Cf. W. Schäuble, *op. cit.*, p. 251.

<sup>11</sup> So far, the fiscal costs of this settlement are completely open and there is no information as to what provisions fiscal planning has made. After World War II, the FRG had spent about DM 130 billion for such purposes over a period of about 30 years; cf. W. Albers: *Der Lastenausgleich, Rückblick und Beurteilung*, in: *Finanzarchiv*, Vol. 47, New Series, 1991, pp. 272 ff.

<sup>12</sup> Cf. e.g. R. J. Barro, X. Sala-i-Martin, *op. cit.*

<sup>13</sup> Cf. W. Schäuble, *op. cit.*, pp. 134 ff.

<sup>14</sup> A case of its own is the Treuhandanstalt. The conflict between the expected privatization and restructuring – based on the very different motives involved such as the bringing of market forces into play, the rapid achievement of revenues, the formation of industrial, regional or incomes policies, etc. – was widely realized, both within the institution and the government as well as outside them. A clear-cut solution, however, could not be reached (or maintained), in particular after the collapse of much of the industrial structure, and now the Treuhandanstalt is trying to show that it can handle both.

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diagnostic difficulties and errors of the first months of the Monetary, Economic and Social Union (MESU), this was understandable. But with the growing awareness of the limited financial and real resources, at least since October 3, 1990, and the employment problems after January 1991, this is no longer the case.

### Fiscal Bias

Discussions of the economics of German unification at first concentrated almost exclusively on its fiscal and monetary consequences,<sup>15</sup> but they now try to incorporate supply-side reactions, wage reactions, as well as monetary policy.<sup>16</sup> However, the real economy or production aspects of the unification in east Germany after the breakdown of the old structures of supply and demand – and also the long-run repercussions of west Germany's aid on its own economy – were, and still are, more or less ignored. What reasons can be given for this fiscal bias of analysis?

First, it was simply a widely held belief that the task of unification was mainly, if not exclusively, a matter of financial means as implied by some kind of production function. Second, unification came into effect at the start of a worldwide recession, very much induced by high interest rates. The international community was hoping for lower interest rates and therefore was anxiously looking at the capital-market implications of the expected huge transfers to east Germany and the resulting public deficits in west Germany, while the implications for world trade, or at least for European trade were often overlooked.<sup>17</sup> Third, fiscal effects of economic transactions by governments are the first to show up. They are expressed in numerical terms and can easily be transformed into very illustrative figures.

So far, all government and most private estimations of the fiscal costs of unification have proved much too low. One reason has definitely been the unrealistically high estimation of east Germany's productivity, with the consequence that the decline of east Germany's post-MESU production was severely underestimated.<sup>18</sup> A second reason, usually overlooked, is that the legal framework of unification and hence the fiscal needs of east Germany could be judged properly only after the

establishment of the MESU and after the Treaty of Unification was approved by the two German parliaments (September 1990). But even then, neither the number nor the amount of fiscal obligations related to unification could be completely foreseen outside the government. This is at least partly confirmed by Schäuble's account: in the summer of 1990, a truly realistic picture of the fiscal burdens to come would have jeopardized the acceptance by the west German electorate in general and the Bundesrat in particular.<sup>19</sup> Whatever the reasons in the end were, fiscal needs do not seem to have caused further trouble in the financial markets (see below).

### Current Fiscal Involvement

The basis of any assessment of the fiscal needs of the five new Länder or the transfers from the old ones is still rather shaky. Since unification on October 3, 1991, much of the legal framework is now clear, but economic development in east Germany, on which the transfers will depend either directly (e. g. unemployment assistance) or indirectly (to compensate for the low tax revenues in the new states) is still very hard to forecast. The initial conditions of the legal and administrative framework are still experiencing modifications: east Germany's poor economic performance led to the increase in the rents for state-administered housing there – scheduled for August 1, 1991 – being postponed to October 1, 1991. This caused a gross revenue loss of about DM 3.5 billion. Leaving a number of investment subsidies aside, specifically designed policies were limited mainly to two programmes: the establishment of the Fonds Deutsche Einheit in May 1990 (DM 35 billion in 1990) and the Gemeinschaftswerk Aufschwung Ost in March 1991 (DM 12 billion in 1991). However, to meet the obligations of the MESU and the unification treaty, most of these sums would have been allocated anyway.<sup>20</sup>

In 1990, the five new Länder received about DM 45 billion from west Germany, more than 90 per cent of which was used for transfers and unemployment assistance (cf. Table 1).<sup>21</sup> In 1991 and in 1992 this amount will rise to about DM 95 billion and DM 100 billion respectively, excluding federal expenditure on central government tasks. These

<sup>15</sup> Cf. U. Heilemann, *op. cit.*, pp. 137 ff.

<sup>16</sup> Cf. e.g. G.A. Horn, W. Scheremet, R. Zwiener: Domestic and International Macroeconomic Effects of German Economic and Monetary Union, DIW Discussion Papers, No. 26, Berlin 1991; W. McKibbin, *op. cit.*, pp. 14 ff.

<sup>17</sup> On the effects in eastern Europe, cf. A. Inotai: Economic Impact of German Reunification on Central and Eastern Europe, Budapest 1991, mimeo.

<sup>18</sup> Cf. e.g. U. Heilemann, *op. cit.*, pp. 32 ff.

<sup>19</sup> W. Schäuble, *op. cit.*, pp. 184, 187.

<sup>20</sup> This holds in particular for the Fonds Deutsche Einheit which was primarily conceived to help east Germany bridge its budget deficits. The rather unusual framework of a fund (backed commonly by the Federal government and the Länder) was chosen mainly to escape difficult and time-consuming discussions on fundamental questions relating to fiscal federalism and the financing of German unity.

<sup>21</sup> From east Germany's perspective, of course, not all of these transfers are seen as help or gifts. For some of them (for example, health care and pension payments) the recipients had paid contributions and therefore had claims.

sums represent about one-half and one-third respectively of east Germany's GNP, or more than DM 6,200 per head in east Germany, or DM 1,700 per head in west Germany. About DM 30 billion of these amounts in 1991 and DM 40 billion in 1992 will have to go for unemployment assistance. The amount spent on public investments,<sup>22</sup> mostly construction, will be around DM 15 billion in 1991 and DM 20 billion in 1992.

The government deficit (according to the national accounts) is scheduled to rise from DM 82 billion in 1990 to DM 115 billion this year. In 1992, despite higher expenditures in the eastern Länder, the deficit will fall to DM 110 billion because of increases in taxes and social security contributions (DM 30 billion in 1991 and DM 40 billion in 1992) and cuts in subsidies (DM 10 billion per year). Despite these reallocations, the government deficit as a percentage of GNP is still expected to be about 4.7 in 1991 and 4.1 in 1992. Taking into account a number of government expenditures outside the budget and future obligations such as those of the Treuhandanstalt (DM 20.8 billion in 1991) and others, the all-German deficit this year could well reach DM 130 to 140 billion. Adding the deficits of the Deutsche Bundespost (DM 15 billion), of the Deutsche Bundesbahn (DM 5.2 billion), and of the Reichsbahn, the east German railway corporation (DM 1.7 billion), DM 150 billion is not inconceivable, which would be more than 6 per cent of German GNP.

There is hardly any doubt that with deficit figures of this magnitude tolerable limits – at least for democratic societies<sup>23</sup> – have been reached. Recent reallocations, even though they are larger than previous ones, amount only to about DM 50 billion or 2 per cent of GNP. Taking into account the announced one percentage point increase in value-added tax in 1993, this would add to 2.3 per cent – the 1983 budget cuts, to date the largest in the FRG, amounted to about 2 per cent of GNP. Yet, there is still much room for further reallocation, even with respect to unification. However, those who were sceptical that the sum of DM 35 billion per year which had previously been spent on so-called division-related costs (Berlin aid, assistance to inner-German border areas, defence expenditure, and so forth) could quickly be made available for other purposes were proven right. Nevertheless, by 1994 west Germany's government deficit could be well

<sup>22</sup> It goes without saying that here our national account-definition of "investment" is a too narrow one.

<sup>23</sup> Predemocratic societies handled the task of state foundation often in a more grandiose way. Though starting from government shares hardly exceeding 5 per cent of national income, in difficult times – such as when forming the nation – they managed to raise this share to more than 30 per cent; cf. G. Schmoller: *Historische Betrachtung über Staatenbildung und Finanzentwicklung*, in: *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich*, Vol. 33, 1909, p. 8.

**Table 1**  
**West German Transfers to East Germany<sup>1</sup>**  
(DM billion)

	1990	1991	1992
Fonds "Deutsche Einheit"	22.0	35.0	28.0
"Gemeinschaftswerk Aufschwung Ost"	...	12.0	12.0
Federal compensation for sales tax	1.3	7.0	7.0
Unemployment insurance	2.0	32.0	35.0
– Starting funds for unemployment assistance	2.0	3.0	...
– Transfers from west German to east German unemployment insurance	...	24.0	25.0
– Federal balance	...	5.0	10.0
Pension insurance	0.8	6.0	15.0
Health insurance	...	2.0	2.0
Other financial aid	18.9	1.0	1.0
Total	45.0	95.0	100.0

<sup>1</sup> Excluding federal expenditures for central government tasks in east Germany.

Source: Own estimates.

below the 3 per cent limit, since tax elasticity, despite the tax reforms in the 1980s is still about 1.07.<sup>24</sup> It should, however, be remembered, that this means a renunciation by the government of the restitution of the tax receipts caused by the fiscal drag and also a renunciation of the originally planned reduction of company taxes.

### Crowding Out?

Despite all the fears stirred by deficits of these magnitudes, there is so far some comfort to be gained from the general macroeconomic reactions on the national as well as the international level. Up to now, the "experiment" of deficit spending on an unprecedented scale has led to the expected growth (about 1.5 to 2.0 per cent GNP growth) and employment effects (about 300,000 to 400,000 employed). The overall price effects were rather small; the significant price increases have been limited to a few sectors (once again, the construction sector), which can hardly be attributed to the transfers to east Germany. There was some jump in German and international interest rates in February 1990, but this was at a time when no serious forecast even of the order of magnitude of the west German transfers could be made.<sup>25</sup> Equally important, it was completely undecided how these expenditures would be financed.

<sup>24</sup> Cf. B. Fritzsche, H. Gebhardt, U. Heilemann, H. D. v. Loeffelholz: *Perspektiven und Optionen der deutschen Finanzpolitik 1991 bis 1994*, in: *Wirtschaftsdienst*, Vol. 71, 1991, No. 1, pp. 21 ff.

<sup>25</sup> For a discussion of some macroeconomic model results of these effects cf. U. Heilemann, op. cit., pp. 137 ff. The effects are still disputed. G. A. Akerlof et al. (op. cit., p. 39) seem to expect no interest effects from German government deficits, while W. McKibbin (op. cit., pp. 16 ff.) expects for government deficits of the current size real interest effects of 1.4 percentage points in Germany and of 0.8 in the USA (averages).

Of course, it might be argued that the capacity of the west German economy had been expanded by the influx of east German immigrants and commuters or that the demand pressure was eased by (additional) imports. Both arguments are valid to some degree, but this reminds us only of some qualifications on the crowding out arguments as to the behaviour of prices and wages. Particularly surprising was that the rate of unemployment was reduced by much more than could be expected from previous experiences: while usually only 20 per cent of a rise in employment is due to recruitment from the previously unemployed, in 1990 this relation rose to 40 per cent.<sup>26</sup> To what extent this was a result of a unique combination of specific sectoral (retail trade) and regional (mostly in the parts of western Germany near to the former inner-German border) effects of the transfers to east Germany, and the employment behaviour of immigrants remains to be seen.

### The Absorption Problem

The previous discussion should have made it clear that in west Germany the limits to the diversion of additional fiscal resources to east Germany have been reached. Limits to the benefits which can be obtained from west German aid are, however, also to be encountered in the east. One of these – others include the lack of structural deliberations – is the so-called absorption problem.

Seen in a macroeconomic perspective, investment expenditure in east Germany of about DM 60 billion in 1991 and DM 75 billion in 1992, some 20 and 28.2 per cent of its GNP respectively, does not yet seem likely to cause noticeable absorption problems. Although east German GNP is far from being a full employment and full productivity GNP, regional and sectoral bottlenecks are already occurring. On the macroeconomic level the difficulties might be attenuated somewhat by the near-doubling of east German imports to more than 70 per cent of GNP, though imports also require considerable complementary activities by east Germany, such as expansions and improvements in roads and transportation. The macroeconomic level, however, is not the most relevant level of concern. For example, one of the widely felt bottlenecks was the telecommunications system. Some of these difficulties, in particular the problem of the telephone connections with west Germany, have been overcome. Other problems, more difficult to

master quickly, include the transport infrastructure or the limited capacities and experience of the east German administration. The latter problem, especially, will not be easily bridged in the near future despite considerable transfers of west German civil servants.

The reasons that an increase in the absorption capacity of the east German economy will require considerable time are not just the lack of the necessary machinery or the lack of capacity of the existing suppliers and distribution networks (even if foreign suppliers are taken into account). More important is the shortage of skilled labour in certain sectors (e. g. construction). Of course, this shortage could be reduced by sectoral and regional mobility *within* east Germany. But given the limited mobility of most of the east German labour force under the old system and the fact that travelling distances to west German employers may often be shorter than those within east Germany, the prospects of overcoming these difficulties in the short run do not appear very bright.<sup>27</sup> Much of the skilled labour force might have been, or will be, attracted to west Germany anyway: 391,000 east German citizens migrated in 1990, and 81,000 commuted from east to west Germany. In 1991 the figures are expected to increase to 500,000 and 350,000 respectively, and in 1992 a further increase to 550,000 and 450,000 is expected.<sup>28</sup> To sum up, by 1992, the east German labour force will have shrunk from 8.5 million to about 6 million.

Rebuilding, and thus improving the absorptive capacity of, the infrastructure needs some setting of priorities corresponding to the expected future sectoral and regional structure of the economy. To speed up the improvement of the transport infrastructure and because of new production requirements, this is likely – despite all the ecological arguments – to require a shift from the railway-oriented system to a transport system relying primarily on roads. Still, the planning for these will require a considerable amount of time.<sup>29</sup> Moreover, the repair and modernization of the infrastructure may produce a kind of J-curve effect, a temporary reduction in its capacity, because in some cases capacities will have to be closed completely for some time.

<sup>26</sup> Cf. Rheinisch-Westfälisches Institut für Wirtschaftsforschung (ed.): Die wirtschaftliche Entwicklung in der Bundesrepublik Deutschland, in: RWI Konjunkturberichte, Vol. 42, 1991, pp. 69 ff.

<sup>27</sup> It has also to be kept in mind that the guiding principle for west Germany's regional policy has been, and still is, to attract capital to labour and not the other way round.

<sup>28</sup> The current or future potential number of commuters and migrants is difficult to estimate for various reasons, such as future economic developments in east and in west Germany, the costs of commuting or migration, etc. Based on 1989 district employment figures, about 3.7 million people or about 45 per cent of all permanently employed (excluding the x-sector and people in vocational training) live in an 80 km belt along the former inner-German border. It should be remembered that the German unemployment assistance scheme requires the acceptance of a daily commuting time of up to 2.5 hours.

<sup>29</sup> The administrative difficulties and lags caused by accepting the very elaborate and rather rigid west German regulations were foreseen, but in the negotiations on the unification treaty the GDR very much insisted on adopting the FRG's legal framework. Cf. W. Schäubel, op.cit., p.207.

A different type of absorption problem usually dealt with under the title "transfer problem" has been caused by the west German transfers on the one hand and the high, rather inelastic preference of east Germans for west German and foreign products on the other. As a consequence, after the start of the MESU a large part of east German consumer goods production, particularly food stuffs, suffered losses of up to 60 per cent, from which it has only partly recovered. So while the transfers certainly increased consumer welfare enormously, at the same time a considerable number of jobs were lost (and the unemployed required additional transfers).

Although many of these difficulties could have been foreseen and some of them, such as the absorption problem, had been, for a long time policy reacted only to the defects in the infrastructure as they appeared instead of following some kind of comprehensive concept.

### Income Determination

East Germany's future economic development and, because of commuting labour, its income will show increasing regional and sectoral differences. The present uniformly depressed picture of the east German economy will soon be much more differentiated, as it is in west Germany. There is no reason why, for example, the textile industries or the shipbuilding industries in the two parts of Germany will perform very differently, though it is not yet possible to figure out winners and losers in detail. Nevertheless, differences in income (as well as in health care, education and other things) between east and west Germany will not disappear quickly. Because of limited physical and financial resources (and time), government will not be in a position to do very much to further mitigate these differences in the near future. Already a few back-of-the-envelope calculations reveal that fiscal policy or, to be more specific, transfers from west Germany can by no means bridge the differences in income (and in general living conditions) between the two parts of Germany. Right now the difference in average monthly wage income per capita is about DM 1,000.<sup>30</sup> Closing this gap would require about DM 95 billion p. a., or DM 3,000 per employee in west Germany in addition to the DM 5,400 per employee transferred already.

East German wage policy can equalize incomes only to a limited extent. While the various wage settlements

earlier this year are intended to establish wage parity between east and west Germany in the next few years, they cannot, of course, fix the level of employment.

Before looking at some suggestions for wage policy in east Germany in more detail, it should be noticed that the disparity in hours worked (weekly and annually) and the numerous and much higher fringe benefits in west Germany complicate comparisons. A simple comparison of the negotiated hourly wage rates gives a biased picture. Tariff wages in the east German metal industry, for example, effectively reach only 40 per cent of the west German tariff level as compared to 63 per cent of the monthly basic wage income.<sup>31</sup>

Catching up in income is certainly a major goal of present east German wage policy. Wage policy in market economies, however, has to serve many masters. In the present situation, its income effects should be seen as of minor importance compared with effects more directly related to the vitalization of east Germany's economy, such as the employment, incentive, or allocative effects of wage settlements. These effects are, of course, not independent of each other and, at least in the short run, in conflict with the income and incentive functions, at least on the individual level. Because the former GDR had a very equalized or flat wage (and salary) structure, matching the greatly differentiated west German structure requires considerable differentiation. Assuming an average growth of 6 per cent p. a. in west Germany and parity of eastern and western wages in five years, the salaries of the highest ranking eastern employees would have, on the basis of 1989 levels, to increase 40 per cent p. a., and wages overall would have to increase 30 per cent. As for sectoral wage differences, for some sectors the annual increases would have to amount to more than 60 per cent.<sup>32</sup> The great social stress which might be caused by these differentiations in a society that considered itself egalitarian need not be emphasized.

As to the employment function, heavy subsidization of wages would be needed to help reduce the conflict between it and the income effect of wages. Most of the pros and cons of these suggestions have been widely discussed elsewhere.<sup>33</sup> Nevertheless, two aspects should be emphasized briefly here.<sup>34</sup> First, any kind of large-scale subsidization would encounter great technical difficulties

<sup>30</sup> In 1989 the average annual income in east Germany amounted to about DM 10,000. In 1992 it will be about DM 14,500 compared to DM 26,500 in west Germany. The nominal increase of nearly 50 per cent in east Germany will be about 20 per cent in real terms. Cf. Rheinisch-Westfälisches Institut für Wirtschaftsforschung (ed.), op. cit., p. 61.

<sup>31</sup> Cf. WSI: Press release, July 30, 1991, Düsseldorf.

<sup>32</sup> Cf. H.-D. Hades: Lohnpolitische Konzeptionen für Ostdeutschland? Eine Analyse zu den lohntheoretischen Überlegungen des Sachverständigenrates, in: Konjunkturpolitik, Vol. 37, 1991, pp. 156 ff.

<sup>33</sup> Cf. e. g. G. Akerlof et al., op. cit., pp. 70 ff. and pp. 87 ff. and the large number of German papers stimulated by these contributions; cf. e. g. F. Klanberg, A. Prinz: Arbeitsmarktpolitik in den neuen Bundesländern: Mehr Irrwege als Auswege, in: Wirtschaftsdienst, Vol. 71, 1991, No. 8, pp. 397 ff.



in the various wage settings. The subsidizing agency would have to decide on the sectoral, regional and occupational wage spread necessary to meet the labour market requirements (see above). Second, and more important, it seems that the east German employment problem is foremost a problem of making marketable, qualitatively competitive products, not a problem of wages. Akerlof et al. operate here with rather optimistic assumptions. This does not mean that the 1991 wage round was helpful in vitalizing the east German economy, to put it mildly. In addition it will cost the taxpayer, because of further transfers for unemployment assistance, DM 9.5 billion in 1991 and DM 17 billion in 1992, provided that there are no further losses in jobs (currently, 100,000 unemployed in east Germany require about DM 1.4 billion p. a. in unemployment assistance).

### Structural Deliberations

For the time being, compared with west Germany the east German economy will be confronted with a considerable lag in gross and, to a lesser degree, net incomes as well as with substantially rising unemployment. Given the rate at which the east German mark was converted to D-Mark at the installation of the MESU, the still relatively high exchange rate of the D-Mark, the high interest rates and the high wage settlements (with an average income tax rate of 4.5 per cent, tax rates are not yet of much importance), sectoral and regional structures will adapt to these macroeconomic conditions with increasing unemployment and migration will continue.

Assuming that migration and commuting will not increase and that west Germany's economy will experience new growth from the "unlimited supply of labour" (Lewis-hypothesis<sup>35</sup>), the soon-to-be-reached, high west German wage level and the increasing capital intensity caused by the generous (up to 53 per cent) investment subsidies will lead to some kind of replication of west German industrial structure in east Germany (see below). Assuming that east Germany will catch up with west Germany's productivity and income level in the next ten years, the main changes in east Germany will occur in the agriculture sector (its share would be reduced from 13 per cent of GDP in 1986 to about 5 per cent) and the service sector (from 18 per cent to 54 per cent), while the shares of the industrial sector and the construction sector will be

reduced from 66 to 31 per cent and from 8 to 5 per cent, respectively.<sup>36</sup> East Germany's natural resources (lignite) and the proximity to, as well as the traditional trade relations with, eastern Europe might be of additional importance in conserving elements of the present structure.

However, strong indications of such shifts cannot yet be detected. West Germany's investment in east Germany, which amounts to about DM 30 to 40 billion, is still relatively small compared with its more than DM 500 billion in total investments. In particular, up to now only a few reallocations can be observed. In 1990, investments in east Germany went to 40 per cent into manufacturing, 25 per cent alone into the automobile sector,<sup>37</sup> and in 1991 these shares may be even larger – a structural development which is not unproblematical, considering the fact that for a long time west Germany has been considered "overindustrialized".<sup>38</sup>

### The Role of Economists

The process of Germany's unification will in a number of ways be of major importance for the future economic development of western Europe. In various ways it will also influence the process of economic liberalization and vitalization in eastern Europe, though the unique conditions and circumstances of German unification will restrict its exemplary value. Despite the importance of this question, (German) economists have in general played only a minor role in shaping the policies of unification, although their participation and influence during the unification process and its debates varied considerably from one point in time to another. It was probably highest during the period in which the decision on the MESU and on the conversion rate between the east German mark and the D-mark were made. Most economists were sceptical about this step, in particular about the conversion rate: there was no doubt about the new Germany not being an optimum currency area, and the conversion rate had not much relation to even the greatly overestimated productivity level, nor to the previous exchange rates. The West German government, however, pointed to the political nature of the decision, to which economic

<sup>34</sup> Fiscal costs could even be lower than calculated by G. Akerlof et al., op. cit. pp. 71 ff., if the subsidies' multiplier effects were taken into account. Interestingly enough, once again, the great attention which the Akerlof et al. paper attracted seems to result mainly from its fiscal prudence.

<sup>35</sup> Cf. C. P. Kindleberger: *Europe's Postwar Growth. The Role of Labor Supply*, Cambridge, Mass. 1967.

<sup>36</sup> The projection is based on the Chenery hypothesis. For the results of the estimations, their outside sample properties, and the various (additional) assumptions of the projections, cf. R. Döhrn, U. Heilemann: *Sectoral Change in Eastern Europe – The Chenery Hypothesis Reconsidered*, in: *RWI-Papiere*, No. 25, Essen 1991, pp. 17 ff.

<sup>37</sup> Cf. C. Schöffel: *Unternehmerische Engagements in den neuen Bundesländern. Eine Felduntersuchung*, in: *iw-trends*, Vol. 18, 1991, pp. 1 ff.

<sup>38</sup> Cf. on this G. Fels, K. W. Schatz, F. Wolter: *Der Zusammenhang zwischen Produktionsstruktur und Entwicklungsniveau*, in: *Die Weltwirtschaft*, Vol. 106, 1971, pp. 240 ff.; see also R. Döhrn, U. Heilemann, op. cit. p. 15.

considerations had to submit themselves.<sup>39</sup> With the benefit of hindsight, we know that the conversion rate was set much too high.

Despite the importance of the decision, even a much clearer picture of the GDR economy would hardly—at least in the end—have made much difference. Even the amount of fiscal aid might not have been very different: a lower conversion rate would have meant an increase in direct transfers to help fulfil the east Germans' aspirations to a quick improvement in their standard of living. Today such transfers are made via unemployment assistance. We also know that continued separate German currency areas would hardly have eased east Germany's economic development, considering the huge differences between east and west Germany in income as well as general living conditions and the ease of migration. Furthermore, there is no evidence that the east German unions would have practised exchange-rate-oriented wage policy.

After the MESU went into effect on July 1, 1990, many economists' earlier evaluations of east German competitiveness turned out to be severely wrong. As a consequence, the effects of the MESU on the east German economy were much more critical than expected, and the attractiveness of east Germany to west German and foreign investors proved much below expectations. The economists not only made errors in their diagnosis of the situation, however. They also proved unable to make meaningful suggestions as to how the difficulties and conflicts connected with the vitalization of the east German economy could be overcome. If there was concern, it was mostly concentrated on the necessity of a tax hike, which, given the level and the sources of income in east Germany, was mainly a question of west German concern.<sup>40</sup> West German forecasts subsequently postponed the turnaround of east German production into 1991 (and now into 1992), but saw no necessity for additional measures or policies to spur the east German economy, beyond the elimination of certain obstacles.<sup>41</sup>

One of the few "positive" suggestions came from the political side, suggesting some kind of tax haven in east Germany, but for a number of reasons was turned down. Most prominent among these were the fear of large-scale tax evasions by west German companies without much

real effect on the east German economy, the minor role of taxes for the east German economy in the next few years, the already large investment subsidies, and the fear of spillover of certain tax exemptions to west Germany. On the other hand there was the proposal of wage subsidies made by Akerlof et al. early in 1991. There were few deliberations on how to deal with the huge expected layoffs in either the private or the government sector. In addition, despite the already large number of investment subsidies and the reluctant reactions of investors, further subsidies came under discussion and gave investors cause to play the waiting game.

To understand the very restrained role of economists, one must consider three factors. First, there was their rather late and reluctant acceptance of the fact that German unification was a political decision from the very beginning up to the execution of the unification treaty; the economic and fiscal implications were seen by the political authorities as being of secondary importance—at least for the time being. Second, for too long many economists (and even parts of the government) seem to have thought of the problem of vitalizing the east German economy as just a repetition of the postwar "economic miracle", though even then it was true that miracles take a little longer. Neither the different conditions under which the two processes took place nor the time actually needed to produce the "economic miracle" were always properly taken into account. For the same reason, much of the government's task was seen as accomplished when the east German stabilization problems were considered solved by the establishment of the MESU and, later on, by the unification and the complete adoption of west Germany's legal system, policy institutions and regulations. Consequently, catching up was considered to be a matter of only a couple of years. Third, the problem of vitalizing the east German economy under the present economic, political, and social conditions is, as we now realize, of a rather holistic,<sup>42</sup> comprehensive and complex nature, restricted by many trade-offs (equalization versus efficiency, short-term effects versus long-term effects, private versus public activities, etc.). Any analysis of the issues must try to take these interdependencies into account, which requires a generalized way of reasoning that is perhaps not too widespread among economists these days.

<sup>39</sup> Cf. e. g. K. Nemitz: Aktuelle Fragen der deutschen Währungs- politik, in: Deutsche Bundesbank (ed.): Auszüge aus Presseartikeln, 1991, No. 43, and the various references given there.

<sup>40</sup> On the effects of rises in value-added and income taxes on selected types of households in east Germany and west Germany, cf. B. Fritzsche et al., op. cit., pp. 29 ff. In general, east German households would be affected only by increases in VAT.

<sup>41</sup> Cf. Arbeitsgemeinschaft deutscher wirtschaftswissenschaftlicher Forschungsinstitute: Die Lage der Weltwirtschaft und der deutschen Wirtschaft im Herbst (Frühjahr) 1990 (1991), Essen 1990 (1991); Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung: Jahresgutachten 1990/91, BT-Drucksache 11/8472, Bonn 1990.

<sup>42</sup> Cf. W. Reinicke: Toward the New European Political Economy, paper presented at the Brookings Institution Workshop "The New Germany and the New Europe", Rottach-Egern, Germany, September 8-11, 1991, pp. 3 ff.