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## Transition without metamorphosis - East Germany's regional policy reconsidered

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**TRANSITION WITHOUT METAMORPHOSIS -  
EAST GERMANY'S REGIONAL POLICY  
RECONSIDERED**

**ABSTRACT:** As a result of German unification on 3 October 1990, East Germany acquired virtually overnight the entire institutional and legal framework of the Federal Republic. Thus German regional policy also began to address problems of transformation and structural change in the New Federal States. But eight years later, decelerating GDP increases, a persistent decline in employment and almost stagnant productivity gains have placed the catching-up process in jeopardy. Structural and regional divergences have endured, or have, in some cases, even been aggravated. This paper shows how certain serious conceptual misunderstandings of developmental priorities have contributed to an enduringly unsatisfactory level of economic activity. The analysis specifically identifies how an already highly controversial framework of western regional policy was transferred to East Germany without regard to existing local needs and development conditions. The paper first looks at the transfer of western regional policy, then examines the peculiarities of the East German economy. Next, a review of the appropriateness of applied regional development strategy concludes that, for the time being, regional economic policy in East Germany appears capable only of supporting certain processes of structural change, while it appears to be unable to induce sustainable growth by itself.

## **1. Regional Policy Efforts in East Germany - Applying the Unchanged Federal Framework**

The Unification Treaty (Art.28) provided the legal framework for the extension of the Western regional policy into the territory of the former GDR. In Germany, Regional Economic Policy is the domain of the Federal States (Länder); the Federal Government participates in planning and financing. (Art 91a Basic Law). The Joint Task for the Improvement of the Regional Economic Structures, the main mechanism established for this purpose, exemplifies this shared responsibility.<sup>1</sup> The implementation of the Joint Task's supporting measures is entirely within the domain of the Länder. They elect and approve projects and may also set priorities according to the nature and degree of regional problems. Guidelines are established every year by the Federal Minister of Economic Affairs, the Federal Minister of Finance and the Länder Ministers of Economic Affairs represented in the Planning Committee. Subsequently, the Bundesrat (upper house of German Parliament) approves and ratifies the guidelines.

German regional policy objectives have been influenced primarily by the constitutional ideal of equal living conditions.<sup>2</sup> It would appear that, to this end, the overall regional policy objectives of growth, equality and stability are being subordinated to a general strategy aiming to balance uneven development. However, this is true only if we look but superficially upon this entangled subsystem of objectives. To obtain a clearer and more informative picture, we need to analyse the different goals individually.

First, regional policy should induce growth in laggard regions.<sup>3</sup> The idea is to identify an optimum growth path by mobilising growth potentials. The orientation of regional policy toward growth must therefore focus on the elimination of factors restraining regional development. However, those bottlenecks could concern every factor of production so that measures in the area of investments in capital, labour and infrastructure might be appropriate. In that context it is of outmost importance to distinguish between a

regionalised growth strategy and a regional growth strategy. A regionalised growth strategy means disaggregation of a nation-wide strategy to optimise overall growth. A regional growth strategy, on the other hand, aims at achieving optimum growth for that specific region, with the main objective of catching up with more advanced development elsewhere. FRG regional policy, in its original design, refers to regionalised growth strategies.

The second objective of regional policy is stability. Instability is caused by different reactions of economic sectors either in the course of a business cycle or, over the long run, in connection with structural change. This will affect regions to a different degree. It is undeniably true that a well-balanced economy can limit negative consequences of divergent development. Regional policy can back diversification of the industrial (respective agricultural) structure by channelling investments through perceptible regional and sectoral differences through controlling eligibility for support.<sup>4</sup> The third goal - equity - is predominantly based on normative values (Towara 1986, p. 11). Justice in terms of equal opportunities finds its regional policy equivalent in the term "convergence": a "simple definition is that cohesion is the degree of disparity between different regions or groups...which is politically and socially tolerable " (Begg 1993, p. 150). Convergence does not necessarily require homogeneous living conditions.<sup>5</sup> Living conditions in each region represent a unique conglomerate of attitudes, mentalities, geographic and historical facts. Therefore, a regionalised equity target needs to be established. As far as identification of objectives is concerned, there is no question that equal emphasis is being placed on all three aspects.<sup>6</sup> But in reality we also need to examine the degree of implementation of those goals. Ewrigman (1986, p. 5) argues quite correctly that the realisation of regional policy is geared mostly toward geographical redistribution. Looking at the overall set of objectives, with first priority awarded to the creation of equal living conditions, this is hardly surprising. The historic background of regional policy in the FRG is also a major factor to consider: the pre-union Länder of the FRG ranked second in the EU with 116,5 % of the Community's GDP per head in 1983

with a standard deviation of 20.7 (EU Commission 1996, First report on economic cohesion p. 132). Compared with other European countries, the poorest region in pre-union western Germany was still richer than the richest region in any of the poorest EU-countries. Therefore Germany placed emphasis on distribution aspects because regional growth performances already seemed to be well in line with national developments, and just a few minor sectoral issues (old-industrialised and rural areas) remained to be addressed by regional policy. In East Germany, however, regional economic policy also has to square with the objectives of stability, efficiency and fairness of distribution. The order of magnitude of the intended catching-up process seems to call for a far more rigorous sub-system of goals with an unambiguous growth preference. It should be mentioned at the very outset that regional policy in East Germany was conducted in different phases, each of which exemplifies certain achievements made during a highly complex adjustment process:

- 1990-1993 primarily transformation oriented
- 1993-1995 general application of Western regional policy (before revision of the Joint Task)
- 1996-1998 medium-term support strategy
- 1998- future developments as prioritised by the federal government.

This is all reflected in the objectives set for East German regional policy, and is also mirrored by the system of regional support that is applied in East Germany. Let us first take a look at the strategic concepts adopted for development in East Germany. First and foremost, "Rebuilding East Germany" ought not to be reduced to mere promotion of regional investment. Especially in the first period, from unification until 1993, aspects of fostering transformation process came to the fore. The main areas of activity were at that time viewed to be <sup>7</sup>:

1. Reduction of unemployment through the promotion of investment and through improvement of the general economic conditions. Emphasis has been placed on the creation of a middle class and on support for trade.
2. Privatisation of formerly state-owned enterprises
3. Immediate inclusion of new citizens into the social security system

4. Extensive use of labour market instruments
5. Improvements of infrastructure
6. Changes in property structure
7. Administrative reconstruction
8. Reduction of obstacles to development.

The basic strategy for promotion of investment boils down to modernisation and increase of capital stock through private investment. In this context, the creation of a new middle class has been considered key for economic reconstruction. Admittedly, the most convincing reason for the vagueness at formulating strategy has been that problems with availability and reliability of data persist to this day. Not least because of increasing budgetary pressures with regard to the Maastricht Criteria, concentration of support was first considered after the revision of the Joint Task in 1995. This was due to a general limitation on the availability of funds rather than being the result of a viable concept of area development.

The second period from 1993 until the revision of the Joint Task is characterised by increased strategic awareness. Overall strategy aimed at inspiring self-sustaining growth based on accelerated investment dynamics.<sup>8</sup> Regional policy acknowledged the range of interactions within the economy and started supporting investment in three domains linked by synergies: infrastructure, productive investment and "soft" supporting factors. Support for productive investment focused for the first time explicitly on SMEs, at least so long as they met the criteria of "primary effect".<sup>9</sup>

The basic system of German regional policy was slightly amended in 1995. This opportunity had also been seized to redefine the "East German Concept". Support had been dramatically reduced and preference was given to industrial investment, which seemed most likely to result in the biggest benefits in terms of a reduction in unemployment. The preferential system of designated areas and the instruments available to it had been adjusted accordingly so as to emphasise regional differentiation. This adjustment allowed a more intensive promotion of SMEs and so-called "non-investive"

projects intending to boost competitiveness and innovation. This was a consistent continuation of the "soft" factor approach. In fact, regional differentiation still remains rather limited. Only two distinct problem categories (structurally weakest regions versus regions suffering from extremely serious problems of structural change) have been recognised, with minor differences in the maximum rate of award.<sup>10</sup>

With regard to future developments, the Federal Government provided a new medium-term concept based on the economic performance achieved.<sup>11</sup> Following remarkable progress in the transition period, support will now be focussed on the set of remaining problems. After 1996, investments in energy supply, wholesale trade, banking and insurance will no longer be eligible for general investment allowance and special depreciation.

In order to strengthen the economy's competitiveness, priority is now awarded once more to "productive investment". Apart from driving investments, regional policy aims at improving capital formation, innovation and export. Taking into account some of the more generally accepted criticism of regional policy support in East Germany, the search was on for a more concentrated and transparent system. This resulted in a reduction of the number of available supportive instruments (as described above), and in the adoption of a time limit. For purposes of the Joint Task, designated areas and conditions for support will be defined in 1999, depending on the prevailing economic situation and on the progress then achieved. Ironically enough, despite a possibility of different results in each region, the Federal Government still assumes full Objective 1 support for all of East Germany.

In general terms, regional policy objectives for East Germany, though they were slightly amended, have always focused on laggard areas. In line with West German regional policy priorities, capital support has been provided in order to limit existing competitive disadvantages. By contrast, the stimulation of growth in areas that already feature a higher

degree of economic development and therefore could truly benefit from and produce results with the huge amount of money spent has never been seriously considered. Furthermore, a proper regional development strategy should reflect distinct and unique development objectives by defining an appropriate set of measures to be applied. Although the first Framework Plan of the Joint Task after German Unification contained some special provision for the new Länder, the basic framework of the Joint Task was simply carried forward.<sup>12</sup> Support conditions and award ceilings were merely adjusted. At that time <sup>13</sup>, Joint Task support was subject to discrimination with regard to:

- Designated areas

Capital grants are only to be awarded within the designated Joint Task areas. Within these areas, growth points will benefit more than non-growth points. In addition, growth points are hierarchically ranked so as to establish a preferential system. For East Germany, mandatory establishment of growth points was suspended.

- Covered activities

The "primary effect" (significant long-term increase in regional income) represented the most important eligibility criterion. For administrative purposes, a threshold of 50 km delivery distance and 50% interregional export had been defined. Based on that definition, only activities in manufacturing, certain services mentioned in the "positive list", and tourism (30% of turnover accounted by establishment) were eligible. For East Germany, the distance requirement had been reduced to 30 km, and until 1992, construction was also included.

- Project type

Joint Task support was also dependent on project characteristics underpinning the idea of increasing regional income. New project ventures were entitled to receive more support than extension projects and those were favoured over rationalisation and reorganisation projects. Modernisation and replacement projects were not entitled to any aid. For East Germany, modernisation and rationalisation projects in tourism were also made eligible.

- Creation of high-quality jobs

In addition, special support may also be provided if the investment creates high-quality jobs. This supplementary support of 20.000/ 15.000 DM in B/C growth points will be awarded for the creation of jobs that pay more than 60.000 DM per annum. For East Germany, this figure had been set at 40.000 DM.

The inevitable conclusion here is that, in the aftermath of unification, the pattern of West German regional policy had been more or less uniformly transferred to Eastern Germany.



Adjustments were made to the maximum rate of investment (5 percentage points more than in West German JT-regions) and to the criteria determining primary effect. The presentation in Yuill (1995, p. 182) illustrates this observation.

**Table 1: Comparisons of Maximum Preferential Rates**

	Maximum Preferential Rates (per cent)		
	Setting Up	Extension	Rationalisation, Reorganisation
<b>East Germany</b>	23	20	15
<b>West Germany</b>			
B Growth Point	18	15	10
C Growth Point	15	12	10
Non-Growth Point	12	12	12

Source: Yuill 1995, p. 182.

The same principles prevailed even after the Joint Task's reform that introduced a more transparent system. From 1995 onwards, all investments within the designated Joint Task areas that meet the criteria of a certain minimum investment (more than 150% of the average depreciation earned over the past three years) or create more than 15 % additional jobs are eligible. Preference will be given to investments with distinguished structural effects, investments strengthening regional innovation capabilities, start-up businesses and the creation of jobs and vocational training facilities for women and youth.

The mirrored support structure in the East shows only minor deviations regarding:

- indicators to designate eligible regions
- award ceilings

A comparison of recent indicators (26. Framework Plan) in West and East shows that their composition is basically the same. 50 per cent of indicators signal problems in the labour market, 40 per cent indicate income inequalities and 10 per cent point to infrastructure issues. But whereas one fifth of the labour market indicators in the West accounts for some measure of development trends (labour market development trends 1992-1995, job prognosis), the East German labour market indicator statically reflects the unemployment quota of 1995.

On one hand, that seems to be justified by widespread economic turmoil in the East caused by a compressed structural change. Such conditions make it extremely difficult to identify trends and forecast developments, and would also seem to make reliable identification of growth centres almost impossible. Certainly the income indicator can support a diagnosis. But the income indicator itself is not a dynamic indicator. Classification based on indicators is the basis for the system of maximum preferential rates that has already been mentioned.

**Table 2: Maximum Rates of Award (per cent)**

Eligible Areas	Maximum Rate of Award (SME) <sup>14</sup>	Maximum Rate of Award (Larger Firms)
A	50	35
B	43	28
C	28	18

Source: 26th Framework Plan (1997), p. 17, own presentation.

A-graded regions are the structurally weakest regions in East Germany. B-regions refer to regions suffering from extremely serious problems of structural change (stronger East German regions) whereas C-regions can be found in West Germany.

As the 26th Framework Plan (1996, p. 15) states, 40 per cent of the East Germans live in A-regions and 60 per cent in B-regions. The award of the maximum support rates is, however, left to the discretion of the individual government. One might therefore reasonably assume that the intended differentiation of regional support could easily be counteracted. An added complication is that adjacent West German regions have been included again to be eligible for general Joint Task support. Thus, any differences in eligibility for support will be levelled out. In an attempt to prevent the relocation of investment from West German regions "bordering on" East Germany into the East, the entire system of directing the flow of investments is put in question. Especially if we consider reduced cost associated with every relocation, this particular risk seems to affect mostly larger and well-established firms that do not require regional policy support in most cases.

It is a fact that Western regional policy has simply been imposed on East Germany. All of East Germany had been uniformly included into the regional policy's main instrument, the Joint Task. The extent of the regional problems in East Germany might well have justified this approach in a transitional period. In the long-term, however, emerging development differences are at risk of being neglected. After the revision of the Joint Task, a minor geographical differentiation ranked by the severity of problem areas has been introduced. The basic structure of the Joint Task (West) has been adopted with marginal adjustments in terms of maximum awards and eligibility criteria. Additional support schemes outside the Joint Task were also applied in the new Federal States but they are in most of the cases also available to West German SMEs.<sup>15</sup> The question of whether this simply transfer to East Germany has influenced regional policy performance there deserves closer examination. To comprehensively assess this issue, peculiarities of the East German economy have to be outlined.

## **2. East Germany's Uniqueness: The Supply - Demand - Trap**

Since the factual economic unification of 1 July 1990, followed by the legal act of 3 October 1990, East Germany's economic development has been plagued by turmoil reflected in virtually every economic indicator. Dramatic developments throughout the East German economy are the results of radical changes in the micro-economic sphere that carried over into the macro-economic arena.

The most telling observation refers to the diminished speed of East Germany's catching up. The past five years were marked by decelerating increases of GDP. Perhaps the most dramatic fact is that domestic demand still exceeds domestic production by 60% in the 5th year after unification. The quoted figures clearly suggest that growth in East Germany cannot be sustained if the economy continues to rely as heavily on transfers as it does

now, a fact starkly demonstrated by the example of the labour market: no significant increase in employment was recorded in the past five years, regardless of the fact that output figures doubled during the very same period.

Unfortunately, much the same is true of productivity developments. Annual productivity gains levelled off at 4%. On one hand, productivity is now twice as high as in 1991, and this certainly explains part of the unsatisfactory developments on the labour market. On the other hand, however, there is substantial reason to believe that these tendencies endanger East Germany's transformation process. East Germany's productivity gains now hardly exceed those of the West.

Several studies undertaken to estimate the level of productivity gains necessary for East Germany to achieve parity with the West remained fairly sceptical about the projected time required, and about the sustainability of this development (e.g. Dornbusch and Wolf 1992, Hallet 1992, Siebert 1994).

The persistence of the productivity-wage-gap represents yet another feature worthy of attention when assessing the state of East Germany's recovery: since 1993, wages have consistently remained 30 per cent above levels which labour productivity would have allowed. Along with other constituents of the troublesome cost-price squeeze in East Germany, this fact may also be considered responsible for East Germany's stalled convergence.

In terms of urgently needed capital investments, per capita investments in the East exceeded comparable figures in the West already in 1992. However, even this isolated promising development appears to slow down lately. If we also take the dimension of the largely outdated capital stock in the East into account, then investment activities are very clearly insufficient. Another argument in support of this disappointing assessment is the assumption that West Germany produces since 1993 - after the unification-induced boom

- within its capacities. Hence, productive per capita investment in the East amounts only to one third more than what the West required to achieve an unimpressively moderate growth rate of 1.5-2.5 per cent.

Aside from productive investment, consumption operates as another factor accelerating economic development. The East German economy shows some major shortcomings in this respect as well. Disposable monthly per capita income rose significantly during the reference period. However, it still amounts to no more than two thirds of the West German level, which leaves considerable room for efforts at stimulating economic growth. Thus, eight years after unification, the East German economy is marked by decelerating GDP increases, by a further decline in employment, and by almost stagnant productivity gains which put the catching-up process in jeopardy.

Various distinct though sometimes interrelated factors on the supply - and demand side of the economy led to the disastrous situation described above. The direct effects of EMSU on 1 July 1990 certainly were another major piece in the German post-unification economic puzzle: virtually overnight, the system of relative prices, including production factors prices, was turned on its head. To make matters even more complex, the currency conversion resulted in a 400% revaluation of the GDR currency (Siebert 1991, p. 310). Soon after unification, East German producer prices fell by almost 50%. But due to the fact that consumer prices remained at previous levels, this development was not matched by a commensurate increase in output (Akerlof et al., 1991).

Another important factor influencing macroeconomic performance has been investment behaviour and, subsequently, development of capital stock. Overall per capita investment in East Germany has doubled in 1996 when compared with the pre-unification year and has now reached 150% of Western per capita investment. As already stated in a DIW (Deutsches Institut für Wirtschaftsforschung) report (1995), this apparently dynamic figure loses some of its impressive qualities when compared with the huge need for

capital in this area. In 1994, East German per capita capital quantities still remain below those of the three last-ranked Länder in the West. If we consider East Germany's low starting point, it becomes evident that the capital endowment per capita has merely increased by a single percentage point.

Total investment in East Germany increased, mostly due to stepped-up investment in services, but without resulting in an adequate increase in output. The statistics of the DIW reveal that this result is in large part based on investment in housing. Investment in manufacturing, a driving force in economic development, stagnates at a level insufficient to close the gap in the foreseeable future. Certainly problems associated with the legacy of the former GDR, including the breakdown of the Eastern Markets, are handy to explain a great percentage of investment obstacles. They will, however, gradually be reduced by increased investment security as a result of "cleared" property titles. Almost the same can be said about environmental clean-ups. Most formerly Treuhand-owned firms have been sold and the market now actually registers excess supply of industrial properties.<sup>16</sup> So it would appear that environmental contamination no longer remains a major investment obstacle.

Investment is heavily influenced by expectations. The future development of factor prices certainly contributed to a rather hesitant investment attitude. In this respect, capital costs in East Germany are predictably determined by a stable macroeconomic environment and a regional policy objective geared toward reduction of capital costs in order to induce investment flows under neo-classical assumptions. However, the basic issue remains the wage-cost-squeeze.

After German unification, Realpolitik demanded an immediate increase in East German wages. Whereas, at the time of currency conversion, East German wages were roughly in line with productivity, the quick convergence of East and West German wages caused a constant wage-productivity gap. This high-wage phenomenon, mainly caused by labour market inefficiencies, also received scientific support from proponents of a so-called

"high-wage-high-tech-strategy". High East German wages have been considered a useful political tool to limit migration from the East to the West and were therefore supported by West-German trade unionists concerned about the prospects for fierce wage competition in the West. However, as pointed out by Akerlof et al (1991, p. 46) it is rather the lack of local job opportunities which will force people to migrate. In this context, the high-wage argument does not stand up to scrutiny.

On the other hand, high wages do engender a certain demand-oriented stability and can therefore support economic recovery. But as long as the increase in East German consumer prices continues to exceed the increase in wages, high wages could not begin to accomplish this rather urgent task. In an attempt to provide theoretical support, Sinn and Sinn (1991) argued that only high wages lead to the necessary restructuring of the East German economy. Low wages would be a wrong and misleading signal and would attract only labour-intensive, low-tech industries. However, as has been shown already, wages represent a crucial cost factor for companies. Wage levels that exceed productivity levels force an increase in product prices, a development that is simply not sustainable in a competitive environment. The income increase clearly exceeds the productivity increase, and as a result of that, unit wage costs are now higher in the East than in the West. Despite sector-specific peculiarities and a marginal trend toward lower wage unit costs, East German unit wage costs still exceed those of the West by one-third.<sup>17</sup>

Investment decisions are mostly taken on the basis of opportunity costs. Financial assets and their market interest rate (hence, the link to a stable macroeconomic setting) are compared with the potential rate of return of productive investments. Uncertainties, lengthy administrative procedures, high entry barriers and infrastructure disadvantages raise the cost of investment and lower the rate of return. An additional influence appears when we look at the money market. Assuming the usual negative correlation between interest rate and investments, higher savings influence investments by lowering market interest rates.<sup>18</sup> As pointed out by Pohl (1979, p. 221), the annual saving rate in the GDR

fluctuated at the end of the 1970s between 5 and 7%. By the end of the 1980s, it had increased to 12.7% (Sinn and Sinn 1991, p. 43). But in the course of German unification, the East German savings ratio did not increase significantly, and the pan-German savings ratio even dropped.<sup>19</sup>

The economy of East Germany is restrained not only by the aforementioned supply-side obstacles. It also has experienced restrictions due to an unsatisfactory level of demand. These issues have been raised recently by the DIW (1996) that emphasised the retarding influences of private and public consumption. Whereas the sluggishness of public consumption is determined by the desire to consolidate public budgets in view of the European Economic and Monetary Union, the lack of private consumption, especially in the East, is caused by a more or less lethargic development of income and transfers.

Statistics provided by Oppenländer (1996, p.6) show the development of monthly income and expenditure in East Germany according to different types of households. Taking for instance the average 3 Persons-Employee-Household as an example, its real income since unification (second half of 1990) and 1994 increased by 131%.<sup>20</sup> Private consumption and other expenditure, on the other hand, increased by 164 %. In addition, the increase in private consumption will be restricted by the development of the income, a fact that has also been repeatedly stressed by Akerlof et al. (1991) in their initial analysis of the East German economy. Therefore, demand-side restrictions have been inherent to the East German economy since 1990. This fact has received substantial scientific support from a vector-auto-regression analysis by Weber (1996). Dealing simultaneously with changes in money, interest rates, prices, wages, employment and output, he concluded quite convincingly:

“ Whilst adverse supply shocks clearly matter before unification, it is primarily adverse aggregate demand shocks and a too tight monetary policy which dominate the German post-unification decline in output growth rates.”  
(Weber 1996, p. 575)



All this suggests that the East German economy is caught in an almost irreconcilable dilemma: the contradiction between companies' individual profit maximising objective (requiring at least congruence of wages and productivity) and the need for demand-stabilising wages (i.e., wages adequate to consumer prices). This unique combination of economic conditions leads us to suppose that a simple transfer of western regional policy that almost exclusively targets the supply side cannot meet development requirements in East Germany.

### **3. Achievements and Limitations of an Inappropriate Development Strategy**

The system of the FRG's regional policy has been subject to fierce criticisms targeting its incoherent system of objectives, the way indicators are defined and applied, and the way measures are implemented. West German regional policy measures, although successful in inducing additional investment, lack severely in efficiency. In the first place, this is due to certain already identified shortcomings concerning objectives and indicators. Second, regional policy measures were merely capital-oriented for a long time and therefore did not reflect economic reality. Practical issues such as organisational structure and supervision also exhibit notable efficiency gaps.

In assessing the feasibility of a transfer of Western regional policy, this paper has pointed out some peculiarities of the East German economy that culminate in two main observations. The first: from a macro-economic point of view, East Germany is caught in a twin dilemma: supply-side shortcomings coexist with restrictions caused by the demand-side. Sometimes, these problems also appear on a regional level in West Germany. But in East Germany they prevail on a large, supra-regional basis. Therefore we must conclude that only a policy mix addressing both supply and demand shortages will be effective, especially on a regional level where these shortages are particularly

pronounced. West German regional economic policy, mostly oriented towards capital support, has not been able to engage in this important task. The stalling of convergence in spite of massive financial transfers has, in all fairness, to be considered the result of policy failure and the failure of the political establishment to address this problem.<sup>21</sup>

The second observation: when we examine the micro-economic structure of the East German industry, certain major differences come to light. In the aftermath of German unification, East German enterprises were suddenly exposed to fierce world-wide competition. Not even 10 % of East German industry were considered viable (Akerlof et al. 1991). On one hand, this influenced the restructuring of industries in East Germany. On the other hand, almost the entire pre-existing network of supplier and consumer relations was destroyed in the process.

Differences in regional economic policy efficiency also stem from the cumulative interaction of regional policy instruments and company structure (Dannhorn 1987). Regional policy can only be successful on a macro-level, that is, in terms of output, employment and growth, if its instruments are applied efficiently on a micro-level. Variations in company structure, including differences in industry sector, size, legal and regulatory framework and strategy require another set of regional policy instruments altogether. The simple transfer of Western regional policy is therefore not a seriously viable approach to promote regional development in East Germany.

Another argument in support of this conclusion is the aforementioned breakdown of the industrial network in East Germany, a matter that has been brought to public attention recently by the DIW (1997a). Economic Base Theory, one of the theoretical pillars of German regional policy and a guideline for assessing projects, suggests that only exports to another region will create additional income for the region. Looking at the severed industrial, communicative and social ties within the East German economy, we must conclude that this will probably not work efficiently as a tool for inducing growth.

Both trains of argument lead to the assumption that the very same regional policy measures will be less efficient in East Germany than they are in the West. The set of statistics<sup>22</sup> provided in the annex clearly supports this argument. In the period of 1990-1996, the Joint Task in East Germany has been successful in inducing investments in the amount of 166 billion DM. The support provided by the Joint Task amounted to 33 billion DM. As a result of that, 564763 jobs were created and 414509 jobs were preserved<sup>23</sup>. If we take the number of permanent jobs (created and preserved) per hundred thousand DM of investments and per hundred thousand DM Joint Task support as a measure of efficiency, differences in the East and West become very obvious. Every DM invested in the East has been as efficient as a DM invested in the West in terms of employment creation. In the East, an investment of 100.000 DM created or preserved 0.59 jobs, whereas in the West 0.5 jobs could be created or preserved. However, every DM of Joint Task support has been only half as efficient in the East as in the West. Whereas Joint Task support of 100,000 DM resulted in 2.92 jobs, it induced employment of 5 people in the West.

Prima facie, this troublesome disparity in regional policy effectiveness could be explained by the enduring existence of disadvantages of location in East Germany that continue to require higher investment incentives in the East than in the West. However, the fact that in both parts of Germany, an average of 30 jobs per case has been created or preserved, appears to contradict this rationale.

The most convincing explanation, which is also quite in line with our argument here, is that Joint Task support is generally less efficient in East Germany than in the West. This is mostly due to the fact that, in spite of obvious differences in economic conditions, Western regional policy has been simply transferred, actually rather blindly transplanted, to East Germany. The absence of more appropriate accommodating measures leads to efficiency losses that affect regional growth.

Another conclusion could be drawn by ranking regions according to their respective Joint-Task-efficiency by number of jobs created or preserved per HT DM Joint Task support, as shown in Table 5<sup>24</sup>. Category I represents regional performance in terms of job creation and preservation that substantially exceeds the East German average. 13% of the East German regions can be found in this category. The distribution between average performance (Category II = 41% of East German regions) and least efficient regions (Category III = 47% of the East German regions) is more even. This evidence suggests that regional policy has performed extremely well in some East German regions whereas regional policy in the majority of cases has been kept at an average performance that is evidently lower than its comparable counterparts in West Germany.

However, a closer look at those 13 most efficient East German regions immediately reveals that outstanding performance must be credited almost exclusively to successes in the preservation of jobs. Only in some rather isolated cases, regional policy succeeded in inducing growth through creation of genuinely new jobs (Gera, Schmalkalden-Meiningen). Thus, regional policy in East Germany appears hardly committed to foster and support structural change. For instance, it did not endeavour to aim at the establishment of growth centres, although the economic conditions in East Germany would clearly call for such a focussed approach.

#### **4. Concluding Remarks**

Perhaps with good intentions, more likely though for lack of conceptual alternatives, Western regional policy has been applied uniformly to East Germany. As a result, East Germany now suffers from the very same shortcomings as the West resulting from unclear objectives and inefficient measures. But in addition, the simple transfer of the pre-existing system to the East resulted in a further loss of efficiency. Regional policy in East

Germany must therefore consider and anticipate very different starting conditions in the regions and create an increasingly specific mix of regional development strategies. The economic situation in the East clearly calls for a more pronounced growth preference to be reflected at the level of regional policy aims and objectives, and at the level of measures to be applied for implementation. In this respect, it would seem that a more promising and effective alternative could be to gear regional policy support toward growth centres.<sup>25</sup>

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<sup>1</sup> Unless indicated otherwise, data cited are based on the 22th/26th Framework Plan of the Joint Task

<sup>2</sup> Raumordnungsgesetz (ROG) 8 April 1965 (BGBl I, p. 306). For a comprehensive interpretation see: Maunz-Dürig, Kommentar zum GG. Art 91 a..

<sup>3</sup> More recently, the focus is increasingly on efficiency instead of growth (van Suntum). As we will see in the course of reviewing critical opinions, the argument will change dramatically to the extent that uneven development can coexist with both national and regional efficiency.

<sup>4</sup> However, some doubts exist in the theoretical discussion about the feasibility of optimum sectoral structure and the possibility of identifying tendencies and requirements of structural change. The author of this research does not support this argument.

<sup>5</sup> Dannhorn (1987, p. 11) develops a similar argument by stressing the issue of different perceptions of living standards and conditions.

<sup>6</sup> BWiMi (1981), p. 5. , 26. Rahmenplan der GA, p. 5.

<sup>7</sup> BWiMi 1995, p. 2.

<sup>8</sup> BWiMi (1996a): Bilanz der Wirtschaftsförderung des Bundes in Ostdeutschland bis Ende 1995, p. 2.

<sup>9</sup> The Joint Tasks supports productive investment only if the eligible company exports into another region. Such exports create extra-regional income (called primary effect). A company is qualified as export-oriented if it exports (50 km distance of delivery) more than half of its production. This extra-regional income will induce a multiplier process by fostering demand in the local economic environment (secondary effect).

<sup>10</sup> The award of the maximum rate of support is left to the discretion of the Länder and it is therefore quite possible that a project obtains the same level of investment grant in different regions.

<sup>11</sup> Cabinet Proposal of 21 May 1998

<sup>12</sup> However, investment support for East Germany is not only provided by the Joint Task. Besides this influential policy instrument, a multitude of programmes exists to foster investment and structural change. The most important federal instruments (BWiMi 1997a) will be presented here briefly although they are not entirely included in the area of regional policy concerns.

- Investment allowance  
A general investment allowance for all of East Germany has been provided to assist with the purchase and manufacturing of new movable assets. The allowance, a fixed percentage on the total cost of eligible assets, is tax exempt. If the eligibility criteria are met, the investor is legally entitled to receive the investment allowance. The support quota depends primarily on the commencement of the investment (ifo 1994b)..A second criterion refers to the area of business and the size of the enterprise. (BWiMi 1997a, p. 12).
- Special depreciation  
For new movable and fixed assets, special accelerated depreciation of 40% is available in the year of purchase (besides 10% of "normal" linear depreciation).
- Other tax exemptions

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Other promotion measures (ifo 1994b) included a staggering of tax due on investment income, and a property tax and trade tax abatement until 1995. Other programmes such as ERP, KfW and DtA schemes provided financial support by granting significant lower interest rates.

<sup>13</sup> The basic framework of the Joint Task was subject to several amendments in the first half of the 90s.

<sup>14</sup> EU Regulation C213/4 (23 July 1996) defines Small and Medium-sized Enterprises as entities with a staff of less than 250 employees.

<sup>15</sup> BWiMi 1996b, Economic Assistance for Small and Medium-Sized Enterprises in Western Germany.

<sup>16</sup> The European Commission (CSF 1994-1999) recorded capacity utilisation rates of 57-85%

<sup>17</sup> Still, as pointed out by the Bundesbank (1997, pp.19), the concept of unit wage costs bears some conceptual difficulties: first, wage costs represent only part of a company's budget. Second, the level of average wage unit costs also depends on the technology available and on the significance of the specific sector. Regions with a different sectoral structure therefore also show differences in their optimum cost structure. A slight drop in East Germany's variable wage cost per value unit supports this argument. Nevertheless, the Bundesbank (1997, p. 29) showed that even if a more sophisticated model accounting for regional average wages and capital cost was applied, East German overall costs remained higher than those in the West.

<sup>18</sup> No doubt that policy must not focus on the savings rate alone. Especially in Keynesian terms, an artificial increase of the savings rate leads to a drop in consumption with severe consequences for the entire economy.

<sup>19</sup> "The present gap between domestic saving and the demand for capital in Germany is considerable and has to be met by foreign investors. Moreover, the savings ratio of private households, which showed sound increases in pre-unification days, has shown a decline of about 2 percent between 1990 and 1994 compared with previous years. It amounted to just 12,25 per cent in 1994 according to estimates by the Bundesbank." (Frowen 1997, p. 6)

<sup>20</sup> But it must be remembered that a substantial part of this income is derived from transfer payments. Therefore, the increase in real income cannot be attributed exclusively to an increase in the economic power of East Germany.

<sup>21</sup> The (statistical) analysis of the question to which degree regional policy measures account for growth (i.e., a gauge for their appropriateness) will be the subject of a research paper by the author to appear soon.

<sup>22</sup> A comprehensive and more detailed set of statistics is available upon request from the author.

<sup>23</sup> A lack of definition of these terms, however, can affect the efficiency assessment. For instance, the jobs at a company that was sold under the auspices of the Treuhand were regarded as new even though they had obviously already existed before.

<sup>24</sup> In a first step, all East German administrative districts were ranked according to their annual performance in terms of job creation/preservation as a result of regional policy support. As a result, four different categories ranked by decreasing regional policy efficiency (1-4) were identified. In a second step, points so allocated were aggregated to identify performance over the period reviewed (1991-1996). As a result, category I captures regions ranked 1 or 2 over the last six years, category II captures all those regions whose performance was in line with the East German average (rank 2 and 3), whereas category III contains administrative districts least efficient in terms of job creation (rank 3 and 4).

<sup>25</sup> Leading German economic research institutions have recently advocated this approach as well (DIW 1997c, Pohl 1995).

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## STATISTICAL ANNEX

**Table 3: Joint Task supported projects in all City/Town Boroughs and Administrative Districts in the New Federal States (East Germany), including Berlin (East)**

Year	Federal State - Land	Number of Cases	Investment Volume in TDM	Designed JT-Support in TDM	Perm. Jobs (PJ) Created	Pres.	PJ per Case	PJ per HT DM JT	PJ per HT DM Inv	
1		2	3	4	5	6	7	8	9	10
1990	BRANDENBURG		11	75634	16252	297	0	27	1.83	0.39
	MECKLENBURG-VORPOMMERN		26	217801	43759	1489	3	57	3.41	0.69
	SACHSEN		1	65985	10700	165	0	165	1.54	0.25
	THUERINGEN		25	165875	35792	674	144	33	2.29	0.49
	Total:		63	525295	106503	2625	147	44	2.60	0.53
1991	BERLIN		336	1537067	313963	4295	7144	34	3.64	0.74
	BRANDENBURG		638	8709193	1780180	21922	5331	43	1.53	0.31
	MECKLENBURG-VORPOMMERN		327	2440083	437976	5320	11570	52	3.86	0.69
	SACHSEN		1432	9582627	1766478	30154	19324	35	2.80	0.52
	SACHSEN-ANHALT		893	8430839	1520815	27167	23426	57	3.33	0.60
	THUERINGEN		592	5934555	1220850	35035	1920	62	3.03	0.62
	Total:		4218	36634364	7040262	123893	68715	46	2.74	0.53
1992	BERLIN (EAST)		353	833898	140660	5088	6731	33	8.40	1.42
	BRANDENBURG		469	2680747	563994	12463	2179	31	2.60	0.55
	MECKLENBURG-VORPOMMERN		624	3823090	542603	9997	10785	33	3.83	0.54
	SACHSEN		1941	9997734	1486605	48319	40018	46	5.94	0.88
	SACHSEN-ANHALT		990	7239084	1445969	34058	6160	41	2.78	0.56
	THUERINGEN		1113	4357027	864246	30964	2480	30	3.87	0.77
	Total:		5490	28931580	5044077	140889	68353	38	4.15	0.72
1993	BERLIN (EAST)		297	1546921	266663	4915	5650	36	3.96	0.68
	BRANDENBURG		1295	5813597	1098721	23870	10448	27	3.12	0.59
	MECKLENBURG-VORPOMMERN		1040	2959149	512571	10840	8297	18	3.73	0.65
	SACHSEN		1820	5896376	1001621	23678	32071	31	5.57	0.95
	SACHSEN-ANHALT		628	7547120	1167932	18739	3313	35	1.89	0.29
	THUERINGEN		2114	6342216	1234219	42771	1671	21	3.60	0.70
	Total:		7194	30105379	5281727	124813	61450	26	3.53	0.62
1994	BERLIN (EAST)		229	1150857	282802	2638	3709	28	2.24	0.55
	BRANDENBURG		1011	6607905	1413356	14805	16442	31	2.21	0.47
	MECKLENBURG-VORPOMMERN		817	2945056	506790	5995	5919	15	2.35	0.40

	SACHSEN	1539	9550117	1666410	20316	25406	30	2.74	0.48
	SACHSEN-ANHALT	443	2834040	548891	9844	3587	30	2.45	0.47
	THUERINGEN	2645	5819635	1081502	36982	5972	16	3.97	0.74
Total:		6684	28907610	5499751	90580	61035	23	2.76	0.52
1995	BERLIN (EAST)	209	529407	157994	1146	1201	11	1.49	0.44
	BRANDENBURG	719	2397045	460058	6963	6866	19	3.01	0.58
	MECKLENBURG-VORPOMMERN	781	1945730	442106	4901	2773	10	1.74	0.39
	SACHSEN	1409	7871927	1595565	12309	25939	27	2.40	0.49
	SACHSEN-ANHALT	530	3739367	886259	9081	5727	28	1.67	0.40
	THUERINGEN	862	3007660	737035	8146	11943	23	2.73	0.67
Total:		4510	19491136	4279017	42546	54449	22	2.27	0.50
1996	BERLIN (EAST)	232	455173	125356	1017	3525	20	3.62	1.00
	BRANDENBURG	787	3978857	847871	6677	19258	33	3.06	0.65
	MECKLENBURG-VORPOMMERN	557	1990809	612519	3622	4279	14	1.29	0.40
	SACHSEN	1384	4662191	1442395	9273	34984	32	3.07	0.95
	SACHSEN-ANHALT	550	7375224	2036004	11168	11154	41	1.10	0.30
	THUERINGEN	1135	3605475	1224002	7660	27160	31	2.84	0.97
Total:		4645	22067729	6288147	39417	100360	30	2.22	0.63
1990-1996:		32804	166663093	33539484	564763	414509	30	2.92	0.59

**Source: Federal Ministry of Economic Affairs, own calculations**

**Table 4 Joint Task supported projects in all City/Town Boroughs and Administrative Districts in the Old Federal States (West Germany), including Berlin (West)**

Year	Federal State - Land	Number of Cases	Investment Volume in TDM	Designed JT-Support in TDM	Perm. Jobs (PJ) Created	Pres.	PJ per Case	PJ per HT DM JT	PJ per HT DM Inv
1	2	3	4	5	6	7	8	9	10
1990	BAYERN/FREISTAAT	15	261539	24192	866	119	66	4.07	0.38
	BREMEN	2	658	57	9		5	15.79	1.37
	HESSEN	72	481046	42526	1666	48	24	4.03	0.36
	NIEDERSACHSEN	90	582998	61802	1586	198	20	2.89	0.31
	NORDRHEIN-WESTFALEN	80	152110	10614	651	68	9	6.77	0.47
	RHEINLAND-PFALZ	26	346351	24394	457	8	18	1.91	0.13
	SAARLAND	10	92311	7973	309	1078	139	17.40	1.50
	SCHLESWIG-HOLSTEIN	41	518645	36838	1356	290	40	4.47	0.32
Total:		336	2435658	208396	6900	1809	26	4.18	0.36
1991	BAYERN/FREISTAAT	63	986256	87196	1991	626	42	3.00	0.27
	BERLIN (WEST)	1	2690	619		17	17	2.75	0.63
	BREMEN	14	41817	2711	255		18	9.41	0.61
	HESSEN	65	197470	17116	998	212	19	7.07	0.61
	NIEDERSACHSEN	494	2070521	195120	6729	1712	17	4.33	0.41
	NORDRHEIN-WESTFALEN	502	4341594	268334	9840	1017	22	4.05	0.25
	RHEINLAND-PFALZ	165	738222	80320	2292	420	16	3.38	0.37
	SAARLAND	119	544901	63492	1825	298	18	3.34	0.39
	SCHLESWIG-HOLSTEIN	48	433139	20299	964	381	28	6.63	0.31
Total:		1471	9356610	735207	24894	4683	20	4.02	0.32
1992	BAYERN/FREISTAAT	42	828824	60702	1444	1564	72	4.96	0.36

	BERLIN (WEST)	1	472	109	5	1	6	5.50	1.27
	BREMEN	25	103906	10938	277	248	21	4.80	0.51
	HESSEN	48	184667	12535	756	72	17	6.61	0.45
	NIEDERSACHSEN	378	1946662	153738	6092	3072	24	5.96	0.47
	NORDRHEIN-WESTFALEN	406	1865712	174000	6519	2431	22	5.14	0.48
	RHEINLAND-PFALZ	181	740865	66728	2346	391	15	4.10	0.37
	SAARLAND	97	988819	154376	1788	226	21	1.30	0.20
	SCHLESWIG-HOLSTEIN	29	127966	8145	346	161	17	6.22	0.40
Total:		1207	6787893	641271	19573	8166	23	4.33	0.41
1993	BAYERN/FREISTAAT	44	326850	30971	581	374	22	3.08	0.29
	BERLIN (WEST)	1	9140	173	6	25	31	17.92	0.34
	BREMEN	16	124882	15228	344	204	34	3.60	0.44
	HESSEN	36	97462	8901	291	86	10	4.24	0.39
	NIEDERSACHSEN	298	1258554	103443	4782	2556	25	7.09	0.58
	NORDRHEIN-WESTFALEN	200	1226993	155687	3484	1781	26	3.38	0.43
	RHEINLAND-PFALZ	106	387861	40148	1076	245	12	3.29	0.34
	SAARLAND	95	604896	82939	1337	2981	45	5.21	0.71
	SCHLESWIG-HOLSTEIN	20	147029	12797	328	1742	104	16.18	1.41
Total:		816	4183667	450287	12229	9994	27	4.94	0.53
1994	BAYERN/FREISTAAT	49	453945	47582	780	770	32	3.26	0.34
	BERLIN (WEST)	78	812045	85137	552	4861	69	6.36	0.67
	BREMEN	6	71043	10088	145		24	1.44	0.20
	HESSEN	32	64110	5664	246	363	19	10.75	0.95
	NIEDERSACHSEN	178	1120427	90339	2773	3529	35	6.98	0.56
	NORDRHEIN-WESTFALEN	177	1215382	132478	3118	3007	35	4.62	0.50
	RHEINLAND-PFALZ	109	436495	33936	1103	59	11	3.42	0.27
	SAARLAND	83	734777	108348	1242	1734	36	2.75	0.41
	SCHLESWIG-HOLSTEIN	10	219679	28299	337	1855	219	7.75	1.00

Total:	722	5127903	541871	10296	16178	37	4.89	0.52
1995 BAYERN/FREISTAAT	57	449952	32701	649	6542	126	21.99	1.60
BERLIN (WEST)	97	583859	73236	713	4353	52	6.92	0.87
BREMEN	9	48729	7144	90	16	12	1.48	0.22
HESSEN	28	136686	14322	243	687	33	6.49	0.68
NIEDERSACHSEN	214	1361888	110581	3070	4715	36	7.04	0.57
NORDRHEIN-WESTFALEN	136	1337119	164705	4109	1590	42	3.46	0.43
RHEINLAND-PFALZ	118	472126	30915	989	321	11	4.24	0.28
SAARLAND	82	276454	41124	850	475	16	3.22	0.48
SCHLESWIG-HOLSTEIN	6	70602	7339	104	898	167	13.65	1.42
Total:	747	4737415	482067	10817	19597	41	6.31	0.64
1996 BAYERN/FREISTAAT	45	417890	55832	679	5035	127	10.23	1.37
BERLIN (WEST)	152	420644	125528	724	3239	26	3.16	0.94
BREMEN	4	20814	3883	31	98	32	3.32	0.62
HESSEN	17	29334	4972	75	323	23	8.00	1.36
NIEDERSACHSEN	186	997117	123260	2096	11955	76	11.40	1.41
NORDRHEIN-WESTFALEN	156	1190385	121633	2962	4992	51	6.54	0.67
RHEINLAND-PFALZ	97	318828	31012	930	157	11	3.51	0.34
SAARLAND	81	689058	100056	1054	1395	30	2.45	0.36
SCHLESWIG-HOLSTEIN	20	280468	36723	567	2122	134	7.32	0.96
Total:	758	4364538	602899	9118	29316	51	6.37	0.88
1990-96	6057	36993684	3661998	93827	89743	30	5.01	0.50

**Source: Federal Ministry of Economic Affairs, own calculations.**

**Table 5: Ranking of East German City/Town Boroughs and Administrative Districts according to their JT-Efficiency**

		CAT. 1991	CAT. 1992	CAT. 1993	CAT. 1994	CAT. 1995	CAT. 1996	JT EFFICIENCY
								0
SACHSEN	MITTLERER ERZGEBIRGSKREIS	1	1	1	1	1	2	7
SACHSEN	PLAUEN, KREISFREIE STADT	1	1	1	1	2	1	7
SACHSEN	ZWICKAU, KREISFREIE STADT	1	1	1	2	1	1	7
SACHSEN	AUE-SCHWARZENBERG	1	1	1	1	2	2	8
SACHSEN	MITTWEIDA	2	1	1	1	1	2	8
SACHSEN	VOGTLANDKREIS	1	2	1	2	1	1	8
BRANDENBURG	BRANDENBURG AN DER HAVEL	3	1	1	1	2	1	9
BRANDENBURG	COTTBUS	1	4	1	1	1	1	9
SACHSEN	CHEMNITZ, KREISFREIE STADT	2	1	1	1	1	3	9
SACHSEN	LEIPZIG, KREISFREIE STADT	2	1	1	2	2	1	9
SACHSEN	MEIßEN-RADEBEUL	2	1	1	2	2	1	9
THÜRINGEN	GERA	3	2	1	1	1	1	9
THÜRINGEN	SCHMALKALDEN-MEININGEN	1	2	2	1	2	1	9
MECKL.-VORPOM.	WISMAR	1	2	1	2	3	1	10
SACHSEN	BAUTZEN	3	2	1	1	1	2	10
SACHSEN	CHEMNITZER LAND	1	2	1	1	3	2	10
SACHSEN	HOYERSWERDA, KREISFR. STADT	1	1	1	1	4	2	10
SACHSEN	ZWICKAUER LAND	4	1	2	1	1	1	10
SACHSEN-ANHALT	HALBERSTADT	1	1	1	3	3	1	10
SACHSEN-ANHALT	HALLE (SAALE)	1	1	4	1	1	2	10
BRANDENBURG	ELBE-ELSTER	3	1	2	2	2	1	11
THÜRINGEN	GREIZ	3	1	3	2	1	1	11
THÜRINGEN	ILM-KREIS	2	2	2	2	1	2	11
THÜRINGEN	KYFFHÄUSERKREIS	2	2	3	1	1	2	11
SACHSEN	DÖBELN	1	3	1	2	4	1	12
SACHSEN	GÖRLITZ, KREISFREIE STADT	4	2	1	1	1	3	12
SACHSEN	LÖBAU-ZITTAU	2	1	2	2	3	2	12
SACHSEN	SÄCHSISCHE SCHWEIZ	3	2	1	3	1	2	12
SACHSEN-ANHALT	DESSAU	1	2	4	1	1	3	12
SACHSEN-ANHALT	QUEDLINBURG	1	2	2	2	4	1	12
THÜRINGEN	JENA	1	1	4	1	3	2	12
THÜRINGEN	SONNEBERG	1	3	2	2	1	3	12
THÜRINGEN	UNSTRUT-HAINICH-KREIS	2	4	1	2	2	1	12
MECKL.-VORPOM.	GREIFSWALD	4	1	2	2	3	1	13
MECKL.-VORPOM.	SCHWERIN	3	3	2	3	1	1	13
MECKL.-VORPOM.	UECKER-RANDOW	4	1	2	3	1	2	13
SACHSEN	ANNABERG	2	3	2	1	3	2	13

SACHSEN	DRESDEN, KREISFREIE STADT	1	1	1	4	4	2	13
SACHSEN	NIEDERSCHLESISCHER OBERLAUS.	2	2	2	3	3	1	13
SACHSEN	STOLLBERG	2	3	2	1	2	3	13
SACHSEN	WEIßERITZKREIS	1	1	4	2	2	3	13
SACHSEN-ANHALT	SANGERHAUSEN	1	3	2	2	2	3	13
THÜRINGEN	ALTENBURG	2	4	3	1	1	2	13
THÜRINGEN	EICHSFELD	4	3	2	1	2	1	13
BRANDENBURG	FRANKFURT (ODER)	2	4	4	1	1	2	14
MECKL.-VORPOM.	NEUBRANDENBURG	4	3	1	2	1	3	14
SACHSEN	FREIBERG	2	1	2	4	2	3	14
SACHSEN-ANHALT	ALTMARKKREIS SALZWEDEL	2	2	3	3	3	1	14
SACHSEN-ANHALT	WERNIGERODE	3	1	2	2	4	2	14
BRANDENBURG	DAHME-SPREEWALD	2	3	3	2	3	2	15
BRANDENBURG	OBERHAVEL	3	4	3	1	3	1	15
BRANDENBURG	PRIGNITZ	3	1	3	4	3	1	15
MECKL.-VORPOM.	STRALSUND	1	2	3	3	2	4	15
SACHSEN	WESTLAUSITZ-DRESDNER LAND	2	3	3	3	1	3	15
SACHSEN-ANHALT	STENDAL	1	2	1	4	3	4	15
THÜRINGEN	NORDHAUSEN	2	1	3	3	2	4	15
THÜRINGEN	SAALE-HOLZLANDKREIS	2	3	2	2	3	3	15
THÜRINGEN	SÖMMERDA	2	2	3	3	2	3	15
THÜRINGEN	WEIMARER-LAND	1	4	2	3	4	1	15
BERLIN	BERLIN (OST)	2	1	3	4	4	2	16
BRANDENBURG	MÄRKISCH-ODERLAND	4	2	4	3	1	2	16
BRANDENBURG	POTSDAM	4	1	2	3	2	4	16
MECKL.-VORPOM.	DEMMIN	3	3	1	3	3	3	16
MECKL.-VORPOM.	ROSTOCK	1	3	3	3	2	4	16
SACHSEN	TORGAU-OSCHATZ	3	2	3	2	3	3	16
SACHSEN-ANHALT	MAGDEBURG	2	3	3	1	4	3	16
SACHSEN-ANHALT	MANSFELDER LAND	3	3	4	1	1	4	16
THÜRINGEN	ERFURT	2	2	3	3	2	4	16
THÜRINGEN	SAALFELD-RUDOLSTADT	2	2	4	1	4	3	16
THÜRINGEN	SUHL	4	3	1	3	1	4	16
THÜRINGEN	WARTBURGKREIS	3	3	2	2	3	3	16
BRANDENBURG	UCKERMARK	4	4	3	2	1	3	17
MECKL.-VORPOM.	MÜRITZ	1	2	2	4	4	4	17
MECKL.-VORPOM.	NORDWESTMECKLENBURG	3	2	2	3	4	3	17
SACHSEN	MULDENTALKREIS	4	2	3	3	3	2	17
SACHSEN	RIESA-GROßENHAIN	3	4	2	2	2	4	17
SACHSEN-ANHALT	ASCHERSLEBEN-STAßFURT	1	3	2	3	4	4	17
SACHSEN-ANHALT	KÖTHEN	3	3	2	3	3	3	17
SACHSEN	LEIPZIGER LAND	3	2	4	4	2	3	18
SACHSEN-ANHALT	BÖRDEKREIS	4	2	2	4	2	4	18
SACHSEN-ANHALT	BURGENLANDKREIS	4	3	2	2	3	4	18
THÜRINGEN	HILDBURGHAUSEN	2	3	3	3	4	3	18

THÜRINGEN	SAALE-ORLA-KREIS	3	2	4	3	3	3	18
BRANDENBURG	HAVELLAND	4	4	3	2	2	4	19
BRANDENBURG	POTSDAM-MITTELMARK	2	4	4	4	3	2	19
MECKL.-VORPOM.	PARCHIM	4	3	4	4	3	1	19
SACHSEN-ANHALT	SCHÖNEBECK	4	2	4	3	4	2	19
SACHSEN-ANHALT	WITTENBERG	2	3	4	3	4	3	19
BRANDENBURG	BARNIM	4	4	3	4	3	2	20
BRANDENBURG	OBERSPREEWALD-LAUSITZ	4	4	4	4	2	2	20
BRANDENBURG	ODER-SPREE	4	4	4	4	2	2	20
BRANDENBURG	OSTPRIGNITZ-RUPPIN	4	4	3	4	2	3	20
MECKL.-VORPOM.	BAD DOBERAN	3	3	3	4	3	4	20
MECKL.-VORPOM.	LUDWIGSLUST	4	3	3	4	3	3	20
SACHSEN-ANHALT	BITTERFELD	3	4	1	4	4	4	20
SACHSEN-ANHALT	SAALKREIS	3	4	4	2	4	3	20
SACHSEN-ANHALT	WEIßENFELS	3	3	3	4	4	3	20
THÜRINGEN	WEIMAR, KREISFREIE STADT	4	4	4	3	4	1	20
MECKL.-VORPOM.	MECKLENBURG-STRELITZ	3	4	4	3	3	4	21
SACHSEN-ANHALT	ANHALT-ZERBST	2	4	4	4	4	3	21
SACHSEN-ANHALT	BERNBURG	4	4	4	4	2	3	21
SACHSEN-ANHALT	JERICHOWER LAND	3	4	4	2	4	4	21
SACHSEN-ANHALT	MERSEBURG-QUERFURT	1	4	4	4	4	4	21
THÜRINGEN	GOTHA	3	4	4	3	3	4	21
BRANDENBURG	SPREE-NEIßE	3	4	3	4	4	4	22
BRANDENBURG	TELTOW-FLÄMING	4	4	4	4	2	4	22
MECKL.-VORPOM.	GÜSTROW	4	3	3	4	4	4	22
MECKL.-VORPOM.	NORDVORPOMMERN	3	4	3	4	4	4	22
MECKL.-VORPOM.	OSTVORPOMMERN	4	3	3	4	4	4	22
SACHSEN	DELITZSCH	3	4	4	4	3	4	22
MECKL.-VORPOM.	RÜGEN	4	3	4	4	4	4	23
SACHSEN-ANHALT	OHREKREIS	4	4	4	3	4	4	23