

Strictly preliminary!

Please do not quote without permission!

Despite or Because ? – Some Lessons of German Unification for EU Enlargement

Ulrich Busch

Humboldt University Berlin
Department of Economics
Institute for Economic Theory II

Christian Müller*

Swiss Federal Institute of Technology Zürich
Swiss Institute for Business Cycle Research

First version: June 8, 2004

This version: July 8, 2004

Abstract

The former German chancellor Helmut Schmidt holds that *despite the huge transfers from West to East Germany* the East German economy does not take off as it was widely expected. We argue it is not despite these transfers but because of them and thus shed light on a completely neglected aspect of East Germany's transition process. Building on the common features of the extension of the Federal Republic of Germany in 1990 and the enlargement of the EU, we argue that the German unification experience holds some lessons to the benefit of both, the EU-15 and the accession countries.

JEL classification: P27, P35, E61, E62

Keywords: EU enlargement, German Unification, transfers, fiscal policy

*Corresponding author. ETHZ-WEH, Weinbergstrasse 35, 8092 Zürich, tel.: +41(0)1 632 ext. 46 24, fax: ext. 1218, cmueller@kof.gess.ethz.ch. The first author wishes to thank the DEUTSCHE FORSCHUNGSGEMEINSCHAFT for financial support.

1 Introduction

In the first half of 1990 German unification (henceforth GU) became a more and more realistic perspective. At that time it was widely held that the joint forces of the probably most advanced economies of the Western and Eastern European hemispheres would generate an economic powerhouse hardly be seen before. At the same time the costs of transforming the East German centrally planned economy into a market economy were significantly underestimated. In particular, those who were politically responsible propagated this task to be almost self-financing while the then chancellor Helmut Kohl stated to pay the extra expenditures with petty cash.¹

Needless to say, the overly optimistic assessments were not only mainly politically motivated but also proved almost entirely wrong ex-post. After a sharp initial decline of about 50% it took the East German economy one more year before it started to grow.² During 1992-1995 the recovery was very fast at about 3-11% annually before the growth rate of GDP dropped below the West German rate.³ This implies that in 1997 the catch-up process of East Germany came to a standstill.

Despite all hassles during the first 13 very volatile years of unified Germany one aspect turned out to be remarkably reliable. This was the need for almost always rising (gross) transfers from West to East Germany of about 141-196 billion Deutschmark (€72 – €100 billion) a year. These transfers are meant to improve the East German economic potential and to bring East German incomes closer to West German levels.

Originally, it was assumed that these payments would be of a temporary nature. After a short while, it was assumed, these transfers would become redundant. This has clearly not happened. In this note we argue that these transfers have not only failed to induce a self-supporting economic boom, instead, the structure of this West-East aid very likely

prolongs the need for subsidies as well as the ability of the West German economy to generate the necessary transfer capability. To our best knowledge, this kind of argument is novel in the literature and political discussion alike. Commonly, the cost structure of the industrial and service sectors are focussed on.

Interestingly, the decision about volume and structure of transfer payments within EU-25 is probably the last major issue to be repeatedly resolved after enlargement. This is a direct consequence of the enlargement strategy of the EU which put restructuring of the economy before actual accession to the community. It might therefore be worthwhile to have a closer look at the GU experiences.

In the remainder of the paper we first establish the grounds on which to compare the German case to the EU enlargement, pointing out similarities and dissimilarities. Second, since our focus is on the role of transfers, the structure and dimension of the West-East German transfers will be highlighted. In order to assess their effects on the German economy a notion by Myrdal (1957) is briefly reviewed and some tentative conclusions are drawn. The final part is then used to assess the benefits of the German experiences for the recent EU enlargement.

2 Comparing German unification and EU enlargement

The usual way to calculate the number of EU enlargements is to sum the steps in 1973 (Denmark, Ireland and Great Britain), 1981 (Greece), 1986 (Portugal and Spain) and 1995 (Austria, Finland and Sweden). None of these can, however, be compared to this year's move. The simple reason is that none of these countries have belonged to the former Soviet block and none of these have experienced the transformation from a centrally planned economy to a market economy. It might therefore appear self-evident that there has been

no comparable situation so far. This however, could also be regarded a misapprehension since in 1990 the two Germanies became one country again. This implied not only an extension of the EU area but also the need to integrate a former planned economy into (the West German) market economy.

Apart from some historical common features of East Germany and Eastern Europe, a few more similarities can be recognised. For example, quite like in the case of German unification the new members join a federal structure, the proportion of the population of the new and the previous members is in the same range of 28% (GU) and 20% respectively, the standard of living in the then German Democratic Republic (GDR) was approximately 40–50% that of West Germany and it is 27% (Latvia)–68% (Slovenia) in the new EU member states compared to the EU-15 countries.⁴ Furthermore, the same principal hopes and fears are attached to the enlargement processes. On the one hand the accession countries look forward to a fast catch up in terms of economic power and ultimately standard of living while the previous members fear competition on labour markets, and an increase of their contributions to the EU budget.⁵ On the other hand, the prospect of conquering new markets for the products of the EU-15 economies is met with some degree of reservation on part of the accession countries since full access to the EU-15 market is not granted from the very beginning. The same could be observed after GU where access of East German producers to West German markets was aggravated by the existing market structures in West Germany.⁶

There are, however, also a number of distinct characteristics. For example, in contrast to GU, the transformation into a market economy has already taken place in the accession countries before they join the EU. Also, the degree of autonomy of the new EU members is much higher than it was for the German new Länder, which ensures a forceful representa-

tion of their self-interests. Moreover, while the East German countries were immediately more or less fully integrated in the legal, social and political system of West Germany, the same procedure will have far less reaching implications for the accession countries simply because there are fewer rules on the community scale than there are on the national level. Likewise, the composition of the EU is culturally much more heterogenous (within and between the EU-15 and the accession countries) than it was in Germany. This will have implications for the readiness to share the costs and benefits of EU enlargement. Finally, unlike in the GU case, the EU is faced with a hard budget constraint that sets an upper limit to all extra expenditures due to enlargement.

3 Volume and structure of West-East German transfer payments

The intra EU transfers appear to be the most important issues which have still to be decided upon in the process of enlargement. The other major topics have already been settled including the strategy for opening the national markets, migration rules, and the creation of market economies in the former centrally planned economies. In fact, the latter aspects can be regarded more or less irrevocable while the EU budget has to be defined each year which will regularly invoke the need for discussion about expenditures and transfers.

As it used to be and still is the case for GU, the motivation for intra EU transfers is likely to be dominated by the objective of fast and efficient integration of the joining countries to the benefits of the whole EU. These benefits are supposed to arise from the higher degree of division of labour and the increased business opportunities due to bigger markets in stable, reliable legal and political environments.

However, the simple fact that the richer EU member states provide resources to support the integration process is by no means a guarantee that the resulting transfers will attain their goals. In particular there is not necessarily a link between the level of transfers and the degree to which the objectives are met. The experiences of GU provide a vivid example in support of this hypothesis.

3.1 Definition

In what follows the term transfer is used to characterise the sum of resources that is provided by an governmental entity without compensation to a receiving entity. In the context of GU the term transfer has underwent a semantic augmentation that now includes the "indiscriminate summation of all payment flows from the federal government to the East German regions".⁷ This augmentation has the unpleasant effect that statistics and figures get blurred in the sense that almost every payment the new Länder receive through the federal budget can be labelled a transfer. This habit makes it very difficult to distinguish between the transfers which are due to unification and those which would also be made under completely different circumstances (see e.g. Burda and Busch (2001)). It is therefore necessary to decompose the gross transfers in an appropriate way.

We will do this in two distinct ways. The first looks at a mainly political aspect. It has to do with the question what part of transfers can be understood as extraordinary aid of the West to the East as compared to the ordinary government activity. The second distinguishes between the principal uses of the transfer. This second approach will then be used to asses some aspects of the effects the transfers have.

3.2 Transfers by motivation

The standard headline figures of gross transfers from West to East Germany are presented in table 1.⁸ If anything, these figures demonstrate that the level of payments is not negligible. In terms of German GDP they turn out to represent roughly 4% throughout the 1990ies. Taking these figure at their face value would, however, highly overestimate the government budgets' contribution to overcoming the East-West German disparities.

This is because table 1 lists the gross transfers as the sum of what can be called general and special transfers respectively. General transfers are the share that is due to the larger geographical area and increased population after unification. They would, in principle, also be paid to the old Länder in line with legal requirements and simply represent the normal activities and tasks allotted to the government and its agencies.⁹ For example, road building and maintenance, administration costs, defence, border control, etc. belong to this category. In other words, these expenses are not subject to a discrete choice of the federal government unless unification would be reversed.

The same applies in principle to yet another and even more important category of general transfers which run under the heading social security provision.¹⁰ They are necessary to cover the global deficits of the unemployment insurance, health insurances, pension funds. The regional deficit between East and West is accounted for by the social security systems themselves.

Table 1 about here.

These general transfers have to be distinguished from those which are especially designated to promote East Germany. The IWH has exemplarily calculated the size of these payments for the years 1997 and 1999. Three principles have been applied. First, the

gross transfers within the federal budget were analyzed if they were due to legislation only introduced for East German issues. This applied to approximately one third of the expenditures given in the fourth row of table 1. In the next step, each position within line four was set in relation to its total in the budget and then judged according to the share of East Germany on the total population. Here, more than one half turned out to be over-proportional, while one fifth was under-proportional. The first group was mainly made up of funds made available to early retirement schemes while the latter included positions like promotion of research. In the last step it was checked if the results of step two are based on measures especially taken for East Germany or not. This way, investment in road construction or waterway development and house building dropped out because they belong to the normal federal activities which just happen to be currently exercised in East Germany more heavily.

In effect, the volume of the thereby identified special transfers are far lower than the general transfers. These two figures show that the political discussions very often focus on misleading information when it comes to the calculation of the unification costs. Even worse, if the transfers are broken down in those components which are not generally assigned to raise East Germany's well being, but also in those which improve the economic potentials. Therefore, we will shed some light on this aspect next.

3.3 Transfers by utilisation

In the longer run the East German economy will have to be able to produce a much larger income compared to today's in order to sustain a standard of living close to the West German levels. The same, of course will apply to the accession countries. Therefore, the speed of the catch-up will also decide about the necessary levels of aid and support.

Ideally, the structure of the running transfers should therefore aim at accelerating economic performance in the first place. Unfortunately, this cannot be observed in Germany.

The previous section held that the lion's share of transfers cannot be considered especially designated to East Germany. The immediate (almost) complete integration of East Germany in the legal, federal political and social systems of Western Germany has to be considered the cause for this fact. The same reason leads to the observation that despite the huge headline figures there is only little leeway for actual investment in the East German economy. In other words, the source of transfers determines their final utilisation.

Zooming in on the separate transfer positions gives the following picture. The largest share of approximately 50% can be considered social transfers. They include direct subsidies for rents, child raising, unemployment benefits, social benefits, balance payments for social security systems, etc. The second largest portion are the so-called uncommitted transfers. Unlike their label suggests, the communities which are at the receiving end, cannot freely decide about their use. Instead, these payments are thought to balance the local budgets which are under-funded due to poor economic performance. Thus, the local administration and part of the infrastructure mainly benefit from those. A more detailed account cannot be given. As a third category the economic infrastructure in a narrow definition can be identified. The construction and improvement of streets and motor-ways, railways, company access points to motor-ways and railways, communication lines, waterways and similar run under this heading. Finally, business development in a general sense is the last major group to be named. It includes subsidies for research and technology, equity capital, establishing companies. Further payments cannot be sorted in either of the positions due to insufficient information.

Table 2 puts the several categories in relation to the total gross transfers. Judging

by the weight of their share, it is clear that the means which directly aim at closing the economic gap between East and West Germany are rather small. In fact, most of the transfers are directly supporting consumption but not the build-up of the economy. Instead, only roughly 20% (about €14– €20 billion) serve the latter purpose.

Table 2 about here.

4 Results and implications for the EU

The previous sections provided a brief overview over the origins and uses of the transfers. This chapter tries to analyze some of the effects these transfers have.

4.1 Determinants of level and duration of transfers

It should be recalled, that the transfers were intended to promote the fast adjustment of the living conditions of the East German population to West German standards. Thus, three parameters determine the necessary transfers. These are the initial relative positions, the desired degree of convergence and the desired speed of adjustment. In the case of Germany only the first of these was exogenous in 1989.¹¹ After unification in October 1990, the second parameter was fixed by the constitution and regarded 100%. Finally, the fear of migration implied that the speed of adjustment would have to be as fast as possible.

The fastest way is, of course, to provide sufficient income transfers. This is the ultimate reason for the large share of social benefits transfers reported in table 2. For example, in 1991 the difference between gross domestic product and total absorption amounted to more than €80 billion. This figure increased to €107 billion in 1995 and remained at this level until the end of the last century. This production gap was closed by state transfers and capital imports. Needless to say, a less ambitious objective in terms of speed of adjustment

would have left more leeway for investments in business development. On the other hand, a less ambitious objective would have called for less generous political promises during the run-up to federal elections and a slower path for unification strategy. Both of them were difficult to accomplish considering a very mobile East German population.¹²

Looking at the results so far, it appears that the need for transfers has not decreased nor can be expected that it will decrease. It won't do so because the economic catch-up process has come to a standstill and the most recent statistics even indicate a widening gap between East and West German economic performance.

4.2 The *circulus vitiosus*

The central hypothesis of this paper is that there can arise a conflict within the choice of the parameters which determine amount and duration of transfers. Under certain circumstances, the larger the transfers the longer they will have to be paid and the more funds are available to finance these transfers. In a nutshell, transfers have to be paid because there are transfers paid. Such a situation where the cause has an effect that is its own cause has been characterised by Myrdal (1957) (among others) as a *circulus vitiosus*. In the current context, it has to be made sure that such a situation should be avoided in the course of EU enlargement. The German experience might help to succeed in that.

The description of the German version of the *circulus vitiosus* has to start with a note on the "exogenous" factors. These are not only the state of the inherited economy but also the structure established in the early stages of unification. Two aspects stand out. First, even before unification took place the privatisation agency managed to sell the (monopolistic) state-owned retail chain to a few West German retail companies such as REWE, Tengelmann and others. This ensured immediate and full access for West German

companies to the East German market. The same could not (and partly still cannot) be observed for the opposite direction. Second, one result of the privatisation was that only roughly 5% of the productive capital remained under East German control, approximately the same amount was sold to foreign companies, the vast majority, however, went into West German hands.¹³ Therefore, East German production capacity and distribution channels were not under East German control. Thus, the decision about how to satisfy transfer financed demand was to either increase capacity utilisation in the West, or to install new and improve existing capacity in the East. To too large an extent the first option appeared more profitable. It did so also because unions enforced speedy wage increases of up to 86% in terms of the West German levels until 1998.

Hence, consumption and investment goods in East Germany in excess of production in East Germany are mainly produced in West Germany. This led to a jump in output, number of jobs and firm profits in West Germany.¹⁴ This additional income raised tax revenues and thereby generated the means for further transfers. Initially, according to Müller (2000) the extra West German income can even be considered larger than the necessary transfers. This sequence of cause and effect with the effect turning into its own cause works until today. The transfer payments still depend on the additional income in West Germany which is generated through the transfer regime. Thus, the circle is closed. Therefore former chancellor Helmut Schmidt was wrong when he stated that "Despite the huge transfer payments from East to West Germany East Germany has not taken off."¹⁵ It is not despite these huge transfers but due to them.

4.3 Solutions

The logic of the *circulus vitiosus* also paves the way to its destruction. The following alternatives could be considered. The first type of measures is concerned with the parameters of the determinants of the transfer volumes. The second relates to the mechanism of the cycle.

Although the exogenous factors such as privatisation policy, propriety structure of productive capital and distribution channels cannot easily be changed in Germany, one should keep their role in mind with respect to implications for EU enlargement. In the German case a more diverse, international and hence more competitive ownership structure in East Germany would ensure that the link between transfers and profits is provided through production in East Germany.¹⁶ The appendix shows in a simple and static model framework that there is an immanent incentive not to let East German consumption be satisfied other than by West German production payed for by transfers. Diversity in the origin of consumed, or rather purchased goods in East Germany would help overcoming these incentives.

Further, the desired degree of adjustment of the East German standard of living to the West German level could be lowered. As it has been argued before, this question touches very delicate issues. For example, the then West German government with chancellor Kohl managed not only to be elected and re-elected in 1990 and 1994 respectively giving the promise to keep this parameter at its 100% maximum level. It also managed to neutralise any appreciable East German self representation with the argument that only West German competence could ensure fast adjustment to the maximum.¹⁷ However, irrespective of the distribution of political power and other aspects, migration poses a permanent thread to any significant deviation from the 100% benchmark or slow-down of

the adjustment process.

Responding to the rising budget deficit and federal debts, the current government has chosen to redesign the social security network (eligibility for unemployment benefits, health care, social benefits). This can be understood as a general reduction of the standard of living which also reduces the absolute amount necessary to establish equality between East and West (see also Busch (2002b) on the shifts in policy objective due to the failure of economic policy). Our results suggest, however, that lower wages and social security provisions while stimulating investment and raising incentives to supply labour, might be less efficient tools than commonly thought (see e.g. Sinn and Ochel (2003)).

The second type of solutions is therefore related to the mechanisms of the *circulus vitiosus*. This vicious circle can probably not be considered an infinitely self-sustaining mechanism. This is because not all West German extra income generated by the transfers to the East can be recovered as taxes. Consequently, federal debt has been rising ever since unification at a higher speed than ever before in post-war Germany. Therefore, the Maastricht criteria provide an upper limit which in the end will result in a ceiling for the transfers with all its implications mentioned before. This of course is not a solution in the sense that it solves all the problems but it certainly is an end to the transfer troubles.

Looking for a real solution leads back to the composition of the transfers reported in section 3.3. It was shown that only 20% are used for the improvement of the economic potential in East Germany. However, as long as the value added in the East remains below total absorption, the need for transfers remains. Therefore, even more efforts are necessary to promote business development. It appears natural to consider radical measure which go beyond what has already been tried. For example the system of taxation could locally be changed and simplified. This opportunity was missed during unification, because

it affected constitutional issues. Second, federal debt rules might be suspended provided that there is some assurance that the means are used successfully. Finally, the new market opportunities in the enlarged EU might induce large enough an economic recovery, that the production gap will be closed automatically.

4.4 Implications for the EU enlargement

The dissection of the German version of the *circulus vitiosus* leads directly to the implications for EU enlargement. The initial conditions have mainly already been fixed. In the light of the German experience, the relevant factors beclouding the prospects of a successful integration of the accession countries are:

1. Asymmetric market access: easy and full access of the existing members to the accession countries' markets but not vice versa.
2. Control of EU-15 economies about accession countries production
3. (Large) EU-15 transfers for consumption purposes to the new member states and
4. Exclusive trade links between EU-15 and accession countries.

The first two points are more or less self-explaining. The seizure of the markets is a pre-condition for optimising the production capacity portfolio. Even if the less developed region has comparative advantages in terms of for example labour costs, there is no need to build up production in those regions if sales are guaranteed by lack of competition.¹⁸ Here, the potentially larger pool of investors in the EU-15 as compared to West Germany alone might make a decisive difference. On the other hand, the accession countries unfortunately have only restricted access to the EU-15 countries' markets.¹⁹ Therefore, the new members will necessarily have fewer opportunities to generate income.

The other two arguments could appear surprising. However, as has been argued before, the more control the EU-15 members have about production and distribution in the accession countries the more efficiently they can channel the transfers into their own balance sheets. The more, however, non-EU members benefit from transfer financed consumption the less successful this mechanism will be.

Further, there are factors that limit the need for transfers in general.

1. No overly optimistic expectations about speed, degree and hardships of adjustment
2. Restriction of migration
3. EU aid should (almost) exclusively be directed at business development, compensation in form of guaranteed purchases or property transfer must not be allowed.

With respect to the first rule, in the run-up to EU-enlargement referenda promises have been made which sometimes remind to German unification. In particular, potentially negative effects are hardly seriously discussed. The second should make sure that the thread of migration does not force transfers for consumption. Third, financial support must be provided only to support economic growth in the accession countries. The benefits arising from the division of labour and larger markets should be considered sufficient for the EU-15 member states. Moreover, it should be remembered that Germany stumbled into a long lasting recession after the initial unification boom. By now, the burden of the unpleasant effects are felt in the whole of Germany. Growth rates are among the lowest in Europe, unemployment at record levels and the public deficit is rising. Therefore, it is in the best interest of the whole EU-25 not to get trapped in the *circulus vitiosus*.

5 Conclusion

German unification can be considered an informative experiment for integrating an economically less developed country into a modern Western economy. In the course of unification expectations were pitched at too high a level and the difficulties were not only under-estimated but even amplified by the integration policy. This led to a situation where huge transfers from West to East became not only imperative but even turned into the cause for their continued necessity. Such constellations have so far only been considered for the aid to third world countries or to be historic phenomena such as the German reparations to England after World War I with the well-known adverse effects.

The situation of the EU accession countries can at least partly be compared to East Germany before unification. This raises the question of how to avoid the adverse effects of a well-meant transfer strategy. The answer is to call for a business development oriented aid policy, the complete opening of the West European markets, restrictions on East-West migration, realistic expectations about the duration of the adjustment and a competitive, diversified proprietary structure of the East European means of production and distribution channels.

Wherever the EU administration or the accession countries still have the opportunities to move in these directions, they should seize it. It should provide a good chance to avoid the German mistakes to the benefits of the whole EU.

A Appendix: A model for static comparison

The following exercise shows that under reasonable assumptions and for a limited time horizon incentives exist which promote the desire for keeping up the level of West-East

transfers. It can be concluded that these incentives are larger the larger the share of East German consumption is satisfied with West German production. In the longer run however, the transfers cannot be paid without increases in the government debt which very well reflects the current situation and likely invokes a fundamental change in policy.

For our model we use the following definitions. Let Y be the West German output, C_E and C_W the consumption in East and West Germany respectively, T is the sum of transfers, τ the tax rate, γ the macro-economic multiplier and α is the share of C_E which is satisfied by Y . We thus have the following system of equations.

$$Y = Y(0) + (1 + \gamma)\alpha C_E \quad (1)$$

$$C_E = T = \tau Y + B \quad (2)$$

$$C_W = (1 - \tau)Y \quad (3)$$

where $Y(0)$ denotes the autonomous production in West Germany that would occur without transfer payments and B are government bonds.

After re-arranging the terms in (1) to (3) we find

$$\begin{aligned} Y &= \frac{1}{1 - (1 + \gamma)\alpha\tau} Y(0) + \frac{\alpha(1 + \gamma)}{1 - (1 + \gamma)\alpha\tau} B \\ C_E &= \frac{\tau}{1 - (1 + \gamma)\alpha\tau} Y(0) + \frac{1}{1 - (1 + \gamma)\alpha\tau} B \\ C_W &= \frac{1 - \tau}{1 - (1 + \gamma)\alpha\tau} Y(0) + \frac{\alpha(1 - \tau)(1 + \gamma)}{1 - (1 + \gamma)\alpha\tau} B \end{aligned}$$

which for $\tau \leq 1$ and $\alpha \leq 1$ only requires $(1 + \gamma)\alpha\tau < 1$ and implies²⁰,

$$\begin{aligned} \frac{\partial Y}{\partial \alpha} &= \frac{(1 + \gamma)\tau}{(1 - \alpha(1 + \gamma)\tau)^2} Y(0) + \frac{(1 + \gamma)}{(1 - \alpha(1 + \gamma)\tau)^2} B > 0 \\ \frac{\partial Y}{\partial \tau} &= \frac{(1 + \gamma)\alpha}{(1 - \alpha(1 + \gamma)\tau)^2} Y(0) + \frac{\alpha^2(1 + \gamma)^2}{(1 - \alpha(1 + \gamma)\tau)^2} B > 0 \\ \frac{\partial C_E}{\partial \tau} &= \frac{(1 + \gamma)\tau^2}{(1 - \alpha(1 + \gamma)\tau)^2} Y(0) + \frac{(1 + \gamma)\tau}{(1 - \alpha(1 + \gamma)\tau)^2} B > 0 \\ \frac{\partial C_E}{\partial \tau} &= \frac{1}{(1 - \alpha(1 + \gamma)\tau)^2} Y(0) + \frac{\alpha(1 + \gamma)}{(1 - \alpha(1 + \gamma)\tau)^2} B > 0 \end{aligned}$$

$$\begin{aligned}\frac{\partial C_W}{\partial \alpha} &= \frac{(1-\tau)(1+\gamma)\tau}{(1-\alpha(1+\gamma)\tau)^2} Y(0) + \frac{(1-\tau)(1+\gamma)}{(1-\alpha(1+\gamma)\tau)^2} B > 0 \\ \frac{\partial C_W}{\partial \tau} &= \frac{\alpha(1+\gamma)-1}{(1-\alpha(1+\gamma)\tau)^2} Y(0) + \frac{\alpha(1+\gamma)(\alpha(1+\gamma)-1)}{(1-\alpha(1+\gamma)\tau)^2} B < 0.\end{aligned}$$

Thus, quite reasonably taxation hurts West German consumption while it enhances West German output and East German consumption. In contrast, the effect of α is unambiguous. The more East German consumption is satisfied by West German production the higher are C_W , Y and C_E . Moreover, a politician would have an incentive to establish a larger α at the expense of τ in order to raise East German support without losing West German voters' support. On the other hand, for $\alpha = 0$, nothing extra would be gained by West Germans that a simple tax financed Keynesian stimulus would not yield anyways.

What is missing though in this analysis is the feedback from East German production. The most likely effect certainly is some kind of crowding out meaning that East German products are displaced by West German products. However, given that the most important decisions are taken in the West this feedback can be considered irrelevant at least in the short-run. Finally, since our model is static, no conclusions can be drawn for the situation in the long-run. It seems plausible however, that over a longer horizon financing this Keynesian style politics will be impaired by price rises, windfall gains and too large a government debt. In sum, although our small toy model cannot capture every aspect, it shows that there are arguments counter to the simple view that transfers are supporting East Germany in the first place and need to be reduced quickly.

Notes

¹The unification spared expenditures which were used to cushion the effects of the division e.g. in the West-East border regions.

²On the reasons for the decline see e.g. Sinn and Sinn (1992).

³See Busch (2002a), Table 4.1-1.

⁴source: European Union: http://europa.eu.int/comm/publications/booklets/eu_glance/14/txt_en.pdf (Europe in Figures).

⁵Süddeutsche Zeitung, December 17, 2003: Prodi: Wer anschafft muss auch zahlen.

⁶This included e.g. the existence of so-called order lists of retail chains which did not consider East German producers. These lists even took effect in the East after West German companies took over the East German retailers.

⁷Federal government: Annual report of the federal government on the state of German unity 1999, Berlin 1999: Bundesregierung (1999)

⁸This section and the following is largely based on Busch (2002a).

⁹The reason to emphasise them as transfers despite their general nature is owed to the weak economic performance of the whole East Germany.

¹⁰It does so in principle only because the payments could only be reduced if provisions were lowered in East and West Germany jointly.

¹¹The introduction of the Deutschmark in July 1990 implied a 300–400% appreciation of the local currency. This and the start of the privatisation led the East German output to decrease even further from an initial level of about 50–60% of West German per capita figures.

¹²Despite all efforts, more than 2 million people moved from East to West Germany between 1990–1999. Approximately 1 million migrated from West to East.

¹³Statement of the federal government in Bundestagsdrucksache 14/2622, 31 December 2000, p.1.

¹⁴See e.g. Müller (1996), Busch (1998).

¹⁵Die Zeit 22/2003.

¹⁶So far it is sufficient to satisfy East German demands by West German production, while the ownership structure ensures that no significant capacity will be installed in the East. Examples of takeovers which resulted in the shutdown of East German companies are numerous. The potash salt mines of Thuringia for instance became very famous due to lasting and forceful resistance.

¹⁷Ironically, one argument to prove this proposition was the migration of East Germans to the West which could not be stopped by the East German government. Since 1998 net migration to the West is rising again.

¹⁸New plants require investments which could be saved if competition is not a thread.

¹⁹Even worse, this applies especially to those products where the accession countries typically have an comparative advantage, like unprocessed food.

²⁰For example, let $\tau = .04$ be the share of GDP income transferred to the East, then the limiting α ($\gamma = 0$) would be around 25%. Thus, at least one fourth of East German consumption would need to be satisfied by transfers.

References

Bundesregierung (1999). Jahresbericht zum Stand der Deutschen Einheit 1999, *Bericht*, Bundesregierung (ed.).

Burda, M. C. and Busch, U. (2001). West-Ost Transfers im Gefolge der deutschen Wiedervereinigung, *Applied Economics Quarterly (Zeitschrift für Konjunkturpolitik)* **47**(1): 1 – 38.

Busch, U. (1998). Sieben fette Jahre?, *Berliner Debatte Initial* **9**(2-3): 89 – 103.

Busch, U. (2002a). *Am Tropf – die ostdeutsche Transfergesellschaft*, trafo, Berlin.

Busch, U. (2002b). Mezzogiorno Ost! Na und?, *Berliner Debatte Initial* **13**(5/6): 144 – 156.

Müller, G. (1996). Impulse der Wiedervereinigung auf die westdeutsche Wirtschaft, *Wirtschaftsdienst* **78**: 357 – 363.

Müller, G. (2000). Nutzen und Kosten für die westdeutsche Wirtschaft infolge der Wiedervereinigung, in D. Brümmerhoff (ed.), *Nutzen und Kosten der Wiedervereinigung*, unknown, Baden-Baden, pp. 48 – 59.

Myrdal, G. (1957). *Economic Theory and Underdeveloped Regions*, Duckworth, London.

Ragnitz, J., Dreger, C., Komar, W. and Müller, G. (2000). Simulationsrechnungen zu den Auswirkungen einer Kürzung von Transferleistungen für die neuen Bundesländer, *IWH Sonderhefte 2*.

Sinn, G. and Sinn, H.-W. (1992). *Kaltstart*, Deutscher Taschenbuchverlag, Tübingen.

Sinn, H.-W. and Ochel, W. (2003). Social union, convergence and migration, *Working Paper 961*, CESifo.

Table 1: Gross general and special West-East German transfers 1991–2003 (bill. €)¹⁾

year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
gross ²⁾	70.66	85.28	95.41	96.12	91.78	92.70	90.65	89.63	100.0	102.0	105.0	110.0	116.0
% of GDP	3.62	4.15	4.61	4.40	4.02	3.98	3.74	3.57	3.71	3.69	3.86	3.89	3.90
fed. gov. ³⁾	38.19	45.71	58.75	58.75	69.43	71.12	67.03	67.54	74.1	75.0	80.0	82.0	83.0
special ⁴⁾	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	21.27	n.a.	24.03	25.0	24.0	24.0	24.0

¹⁾ sources: Federal ministry of finance, Federal ministry for economic affairs, Halle Institute for Economic Research (IWH) Press Release 21/2003, Deutsche Bundesbank, other, own calculations.

²⁾ including transfers by social security system (health insurance, pension), by West German Länder and communities. For 1991-1994 also including budget of East German industry holding (privatisation agency) Treuhandanstalt and fund "German Unity", excluding EU payments.

³⁾ Federal government: general transfers without revenues raised in the East German Länder

⁴⁾ special transfers corrected for items not especially assigned to promote East Germany

Table 2: Transfer utilisation 1991–2003 (shares)¹⁾

year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 – 2002	2003
infrastructure ²⁾	12.3	9.9	8.6	10.0	13.1	13.1	13.1	12.8	12.5	n.a.	13.0
business development	2.5	4.8	7.6	7.5	8.0	6.9	6.3	6.3	5.8	n.a.	9.0
social benefits	45.4	54.0	54.0	53.8	49.4	50.3	50.0	49.4	51.7	n.a.	45.0
u.c. transfers ³⁾	28.1	22.4	20.1	19.5	23.8	24.3	24.8	25.6	24.4	n.a.	21.0
other ⁴⁾	11.7	9.0	9.6	9.2	5.7	5.4	5.8	5.8	5.6	n.a.	12.0
sum	100	100	100	100	100	100	100	100	100	n.a.	100

¹⁾ total including EU payments (appr. €2.5-3.5 billion), sources: Federal ministry of finance, Federal ministry for economic affairs, Halle Institute for Economic Research (Ragnitz, Dreger, Komar and Müller (2000)), IWH Press Release 21/2003, own calculations.

²⁾ businesses relevant infrastructure

³⁾ Uncommitted transfers: payments for unrestricted use by the receiver.

⁴⁾ Transfers for whose use only insufficient information is available.

Table 3: East and West German growth 1993 – 2004 (annual percentage change of GDP)¹⁾

year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
East Germany	7.8	5.8	8.5	5.13	2.0	1.7	1.0	1.5	-.2	.1	.2	1.3
West Germany ²⁾	-1.7	2.4	1.6	1.3	2.3	2.8	1.8	3.0	1.0	.2	-.1	1.5

¹⁾ The values for 2003 and 2004 are estimates sources: Joint prognosis of the five leading German institutes for business cycle research. Published in German Institute for Business Cycle Research Berlin (DIW), Weekly reports , 43-44/1996, 44/1997, 43/1998, 17/1999, 43/2001, 23/2002, 43/2003.

²⁾ Including Berlin