German Unification : Economic Consequences and Policy Lessons

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Introduction

The fall of the Berlin Wall (in November 1989), the economic, monetary and social union between the western Federal Republic of Germany and the eastern German Democratic Republic (in July 1990) and ultimately the political unification of the two states (in October 1990) have led to the biggest economic experiment in modern history; namely, to synchronize two areas which were quite different from each other in terms of size and level of development; in the West, the population amounted to 63 million compared to 16 million in the East, the West German GDP was nearly ten times as high as East Germany's GDP and per capita income in East Germany was about 30 per cent of West German level.

Germany is not the only case of the transformation of a former command economy. The rigid system of central planning collapsed everywhere in Eastern Europe and forced fundamental economic reforms (Poland, the Czech Republic and Hungary took the lead). But the German case is unique in the sense that it has involved the integration of two extremely disparate economies under market conditions. The experiences made in Germany and the problems ahead may be of some interest for other nations such as China and Korea, which are still politically separated and where unification may happen some time in the future.

Unprecedented Challenges and Repercussions

The unification caused dramatic changes within the German economy as a whole. Moreover, it was also perceived as an external shock for the rest of the European Union and even the world economy.

Domestically, the major challenge was to transform the communist centrally-planned economy of East Germany, as practiced during four decades in isolation from international competition, into a social market economy of the kind established in West Germany with a free enterprise system and a deep integration into the global division of labor through trade and investment. This had to be done rapidly. The aim was to create adequate conditions at the macro and micro level for an economic catching-up of East Germany, to reduce the East-West income gap, and thus to prevent massive emigration to West Germany. There was a daily exodus of up to three thousand people in early 1990; millions of citizens were ready to leave. And there was no detailed blueprint on how to bring integration about and no clear idea on how to carry it out at low fiscal costs without inflationary pressure (remember that Germany is a very stable-currency-conscious country).

With regard to the rest of Europe and other countries, German unification had three implications. It changed the patterns of merchandise trade and generated a boost to partner country exports in the first place. This change was due to a surge in demand by East Germans, who were eager to spend their savings on western consumer products never available in the past. In a way, the expansion of German imports prevented western European countries from sliding into a deep recession at that time. The trade surplus, which in West Germany had been running at 6 per cent of GDP during the second half of the 1980s, dropped to 4.3 per cent in 1990 and 0.8 per cent in 1991 for unified Germany. The surplus has increased again since then, but the GDP share of 3 per cent in 1996 is still lower than it was in 1989.

The second implication was that both nominal and real interest rates rose as a result of a shift in the world's investment-savings balance, when Germany's current-account balance began to deteriorate sharply. It changed from a surplus of 4.9 per cent of GDP in 1989 to a deficit of 1 per cent in 1991, a swing of DM 136 billion. This change in the net external position of Germany has not been reversed thus far. In 1996, the current-account deficit was still 0.6 per cent of GDP, which means that the cost of unification cannot fully be financed by domestic savings. Hence, West Germany, a net capital exporting country, became a net capital importing country after unification.

The third implication was that the Bundesbank applied a tight monetary policy to combat against the emergence of inflationary pressures within united Germany. This created an additional upward push to domestic interest rates. It spilled over to the rest of Europe, not least because of France and other member countries' resistance of the European Monetary System to an upward realignment of the German mark (as advocated for by the Bundesbank). In this respect, German unification had adverse repercussions to other countries.

The Chosen Approach: Integration by "Big Bangs"

It is well-known that systemic reform requires a comprehensive package of coordinated liberalization measures: the introduction of clearly defined private property rights, freedom of action for entrepreneurship and private initiative, abolition of state monopolies, promotion of competition, liberalization of all prices and establishment of a market-based pricing system, liberalization of foreign trade and capital movements, move towards convertibility of the currency, creation of a two-tier banking system and of a capital market, establishment of a budgetary system and a tax system, and the creation of a general legal and institutional framework to govern commercial relations.

The timing and sequencing of these reform policies has been a matter of controversies in politics and academic circles (de Melo, Denizer and Gelb, 1996). This is not the place to analyze the various aspects discussed in the literature. In general, the choices depend largely on both the capacity of the economy to effect the restructuring with macroeconomic stability and the avoidance of social unrest. Whatever the merits and results of competing models might be, in Germany's case, the political decision was taken straightforward in favor of shock therapy (with only a few transitional provisions in some areas, such as housing rents and labor layoffs). Hence, the German model differed strongly from the gradual approach chosen by other post-communist countries of central and eastern Europe. One reason for the difference might have been the fact that East Germany could "import" the institutional requirements for the transformation process from West Germany and that the costs of reform (one aspect of the communist legacy) could be borne by the prosperous western Germany. While other transforming countries had to help themselves (foreign aid was limited), East Germany could benefit from having rich cousins.

The economic transformation of East Germany was modeled on five key elements, namely:

1) the instant adoption by the still existing GDR of a fully convertible, hard currency (Deutschmark), of a central bank with a high international reputation of price stability (Bundesbank) and of a well-functioning financial sector - when the monetary union became effective on 1 July 1990;

2) simultaneously, the immediate integration of the East German goods and services markets into the European Community and the whole world economy, i.e., the sudden exposure of local enterprises to price and quality competition with western (including West German) firms- as a consequence of abolition of trade protection and the removal of barriers to capital movements;

3) at the same time, the full unification of the western and eastern labor markets - for there were no longer restrictions on east-west migration;

4) the prompt transference of the whole legal, tax and all-embracing social insurance systems as well as of the whole institutional framework, including administrative structures, from west to east of united Germany - when on 3 October 1990 the GDR gave up sovereignty by self-liquidation and joined the FRG (according to Article 23 of the West German Constitution of 1949);

5) the quick implementation of a privatization program by a government property trust (Treuhandanstalt) with the aim of selling viable firms as rapidly as possible to domestic and foreign investors, liquidating non-viable firms and restituting firms to dispossessed owners.

The immediate transition to a market economy bluntly unveiled the structural weaknesses of the East German economy (German Council of Economic Experts, 1990; Fels and Schnabel, 1991): capital stock, valued at world market prices, was obsolete to a large extent; industrial enterprises were immensely overstaffed; in agriculture, there was much hidden unemployment; productivity in the tradable goods sector was one-third of the West German level; X-inefficiency within firms was high; industrial technology was backward; products were old-fashioned and of poor quality; environmental pollution was extremely high; the infrastructure (highway system, railways and telecommunications) was outmoded and insufficient by any reasonable standard, and so was the stock of buildings.

Moreover, the administration was oversized and inflexible and had great difficulties to cope with the new tasks in a market economy and to assume its responsibilities when decisions had to be taken. The overall production and employment structure was strongly biased towards agriculture, energy and mining, metal production and mechanical engineering; somehow the numbers resembled those of West Germany in the mid-sixties (Fels and Schnabel, 1991, Table 2).

It became clear that all the statements by communist leaders and government officials of the former GDR concerning the industrial and technological strength of the East German economy and its capability to compete with West Germany were just propaganda or wishful thinking. The command economy had never had the chance to win the race for the best system. It was inherently in conflict with the principles of an efficient allocation of resources.

Initial High Expectations: Soon Over

In the beginning, expectations were bright. Most politicians and many analysts thought that the introduction of market principles in East Germany would lead to a second "economic miracle", comparable to that of West Germany after the currency and economic reform of 1948. Chancellor Kohl predicted "blooming landscapes". The East German population expected to reach the living standards of West Germany within a few years. Most of the financial resources required for a successful catching up - at that time they were estimated at DM 1.2 trillion for the period 1990-2000 (Siebert, 1990) - were expected to come from West German savings and private capital flows from abroad. The public budget was projected to provide only a "push off" financing, whereas higher taxes to pay for unification costs were officially ruled out. The Treuhandanstalt was expected to obtain sizeable proceeds from the selling of firms during the privatization process. Warnings about the likely difficulties and problems of the transformation process, for instance those by the German Council of Economic Experts (1990, pp. 306-308), faded away like cries in the desert; in a time of general euphoria they had no chance to be taken into consideration.

The great euphoria of those historical days was soon to end. The deepness of the needed structural adjustment and the extent of the financial burden had been clearly underestimated. Let me describe briefly the salient developments:[1)]

1) To begin with, there was a severe output contraction in East Germany. Industrial production fell about 70 per cent from mid-1989 through early 1991. In the agricultural sector, output slumped also. East German real GDP fell by around 40 per cent within the two-year period of 1990-1991 (by contrast, West German real GDP increased by almost 11 per cent). In this sense, the East German experience is similar to that of other post-socialist reforming countries; before they improve, things become worse, a kind of a "J-curve adjustment" as discussed in academic circles (Van Long and Siebert, 1992).

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1) For details, see the annual reports of the German Council of Economic Experts from 1991 onwards. See also the Adjustments Reports ("Anpassungsberichte") which have been jointly prepared by the Deutsches Institut für Wirtschaftsforschung Berlin, the Institut für Weltwirtschaft Kiel, and (since 1993) the Institut für Wirtschaftsforschung Halle (the most recent report is from January 1997). For further analysis, see Dornbusch and Wolf (1994) and the European Commission (1994).

2) Employment fell sharply. The hidden unemployment which had prevailed under the old regime was suddenly transformed into open unemployment. About 3.5 million jobs were lost between mid-1989 and end-1991. Within this short period the rate of registered unemployment jumped from zero to 11.3 per cent of the labor force (the West German unemployment rate at that time was 6.1 per cent, the lowest since 1982 when the unemployment rate was 7.2 percent). In fact, the adverse employment impact in East Germany was much harder; in 1991 about 1.6 million workers were kept in firms on short-time payrolls receiving generous financial compensation, and another 194,000 people were absorbed by publicly financed "job-procurement companies" and other measures of official labor-market policy. Thus, 22.4 per cent of the East German labor force were shifted into a parallel labor market, a new kind of hidden unemployment (this time in the market economy). Mainly workers in the manufacturing industry and the agricultural sector were affected by the layoffs and temporary measures of job protection.

3) The financial resources needed to rebuild the East German economy and to adjust the living standards upwards (large-scale infrastructure investments, transfer payments to social security and fiscal subsidies for private investment) amounted to almost DM 106 billion in 1991, equivalent to 3.8 per cent of West German GDP. This increased public sector borrowing requirements and made substantial direct and indirect tax hikes inevitable. All the more there was no political determination to cut back public expenditure or to rearrange spending priorities in favor of East Germany (as the German Council of Economic Experts has advocated for repeatedly). The public-sector account, which exhibits a surplus of 0.2 per cent of West German GDP in 1989 after an eight-year path of budgetary consolidation, shifted

into a deficit of 3.6 per cent of all-German GDP in 1991. Thus, immediately after signing the Treaty of Masstricht for the planned European Monetary Union, Germany, which together with France was and is the promoter of this integration project, failed one of the two fiscal convergence criteria (the other one refers to the debt-to-GDP ratio which in all-Germany also rose, but with 41.8 per cent at that time still remained below the 60 per cent Maastricht value).

4) The privatization program, which started immediately, did not generate net revenues for the Treuhandanstalt, but deficits. In 1990, the deficit amounted to DM 14.1 billion, and in 1991, even to DM 39.4 billion (0.4 per cent and 1.4 per cent of all-German GDP, respectively). By the end of 1994, when this public agency was dissolved, these liabilities had increased to a staggering DM 204.6 billion (6.2 per cent of total GDP).

Why were initial expectations not met? There are different causes, which to a large extent are rooted in inadequate domestic policies and behaviors.

Perhaps the most important policy decision which was to influence the transition process was taken in the context of establishing the monetary union. GDR-marks were converted into Deutschmarks at 1:1 for wages, pensions, private household savings and small bank deposits; other claims and liabilities were exchanged at a rate of 2 M: 1 DM.

1) Politically, the conversion at generous rates was to serve a double purpose. On the one hand, outmigration of East Germans was to be prevented (mind that the most popular slogan after the fall of the Berlin Wall was, "If the Deutschmark does not come to us, we shall go to it."). On the other hand, the purchas-

ing power of East German residents should be protected from falling dramatically; that was understandable.

2) But from an economic point of view, the chosen approach was questionable. True, the conversion rate should be in line with purchasing-power parity considerations (Sinn and Sinn, 1991, pp. 34-46). However, the GDR-mark was undervalued due to the well-known Balassa effect; its conversion at par for wages implied an appreciation of the GDR-mark of some hundred per cent relative to the implicit exchange rates used in East German foreign trade before unification (Siebert, 1991, p. 310). The rate was not helpful for initiating the integration of East German industry in the world market. And it soon became a burden for many firms when trade unions boosted wages ahead of productivity advances which were small on average. In manufacturing industry, for instance, hourly wage rose by an astonishing 42 per cent between early-1990 and early-1991. Hence, labor unit costs were pushed well above West German levels (by about 75 per cent). Under these circumstances most firms in almost all sectors were not competitive and had to reduce production, discharge workers or even close down completely. Due to the disappearance of its own exchange-rate instrument, the East German economy was fundamentally put under severe adjustment pressures than was the case in other eastern European countries, which could and did devalue their currency, if necessary. Both the West German Federal Ministry of Economic Affairs and the Bundesbank has suggested, early in 1990, a conversion rate of 2 M: 1 DM for all transactions.

The wage policy of trade unions was conditioned from the outset by the aim of achieving nominal wage equality between East and West Germany within a few years, irrespective of the development of labor productivity. Those who had hoped that the one-to-one conversion of wages would sway trade unions for a while not to change eastern wages were belied; they had not considered the fact that trade unions did not yet face any noteworthy countervailing power on the employers' side.

1) The rationale of this approach might have been to attract workers for membership to protect West German jobs from low-wage competition from the East, to discourage migration to the West, or to assure justice in the sense of "equal pay for equal work". Whatever the rationale, it was a conscious decision in favor of high wage levels and capital-intensive production in East Germany. Thereby, the potential of comparative advantage in labor-intensive production was negated.

2) Trade unions were aware of the detrimental effects of an excessive wage strategy on employment in East Germany. But they deliberately shifted the responsibility for coping with these effects to the social unemployment insurance system and the taxpayers. It is fair to say that the German system of collective wage bargaining, based on the autonomy of trade unions and employers' association, has proved a failure in East Germany. To be sure, nobody expected (or wanted) East Germany to become a low-wage region; both the integration of regional labor markets and the possibility to emigrate in search of higher wage jobs in the West made such a notion unrealistic anyway. However, it should have been attempted to keep statutory wage increases at a moderate pace and to leave the payment of eventually higher effective wages to the individual firms according to their economic prospects and the skills of their employees. A strategy of wage moderation in combination with a wage drift would have been more in line with the adjustment require-

ments of the transition than the chosen aggressive approach; consequently, adjustment of the labor market could have been less painful.

3) Because of the fact that trade unions were not ready for a strategy of wage moderation but committed themselves to wage-hikes, proposals to grant temporary wage subsidies to firms with the aim of fostering more labor-intensive investment, as discussed in academic circles (Akerlof et al., 1991; Begg and Portes, 1993), were invalidated. Then, the moral-hazard problems would have become quite serious. The danger that the wage subsidization might have continued for a long time and perhaps at increasing amounts at the expense of German taxpayers should not be underestimated.

Two additional factors on the demand side contributed to the output collapse and the sharp fall in employment.

1) First, East Germans substituted quickly to West German products. Most East German firms, especially in the consumer goods sector, began to lose their former captive market even before the monetary union was effected. Local demand almost doubled East German real GDP in 1991; the gap was closed mainly through vast public transfers (DM 105 billion or 3.8 per cent of West German GDP in that year).

2) The second factor is another form of trade deflection: it refers to East German exports. Before unification, the lion's share of GDR's exports (approximately 75 per cent of the total early in 1990) had been directed to the Soviet Union and the other member countries of the communist-bloc CMEA on the basis of a payment system of non-convertible currencies (pegged to the so-

called transferable rouble). The German monetary union required east European importers to pay in hard currency (the availability of which was quite limited everywhere), and the liberalization of foreign trade in these countries (along with the dissolution of the CMEA early in 1991) allowed them to import western goods, for which they revealed a high preference. During 1991, East German exporters lost almost completely their traditional markets in eastern Europe, in spite of government aids (especially for transactions with the former USSR). This loss could not be compensated by way of a geographical reorientation of foreign trade. Most firms were not able to penetrate western markets in the European Community and beyond.

Last but not least, two major problems arose with regard to privatization which were to become serious obstacles to fresh investment.

1) One stemmed from a great initial uncertainty about property rights. The Unification Treaty had established the principle of restitution in kind to original owners; this was given priority over monetary compensation. The beneficiaries were those expropriated by either the Nazi government or the GDR government (the confiscation of property by the Soviet military authorities in East Germany during the period 1945-49 were not to be compensated at all). This rule led immediately to more than one million claims of restitution by previous owners (including many East German residents) that took much time to solve. In the meantime, potential investors were wary of engaging themselves in the East (though there were a few large-scale greenfield investments, circumventing the property-right problem). When the Federal Parliament relaxed their prerogative of restitution by law in March 1991, investors' attitude changed only slowly.

2) The second obstacle was related to the privatization policy itself. Although the Treuhandanstalt was expected to sell firms at the highest price, it was a matter of public controversy whether or not the agency itself should make the firms viable before proceeding with their privatization. In addition to that, the agency was called to pursue structural policies for the sake of saving jobs and retaining so-called industrial cores for a subsequent take-off in East Germany. From an economic point of view, privatization is the best way to attain efficient restructuring (German Council of Economic Experts, 1990, pp. 229-233; Siebert, 1991, pp. 300-303; Hax, 1992). In comparison to a private buyer of a state enterprise, a public agency is in an inferior position when profitable investment opportunities, promising products and markets have to be identified. Which information about future developments should this agency have that private investors do not? A private investor has a great interest in scrutinizing very carefully his plans, because otherwise he will lose money. Structural policies would have been dangerous because they were bound to degenerate into a subsidization program for non-viable firms, thereby to delay the required adjustment and thus to burden German taxpayers with an ever increasing bill. In practice, however, the Treuhandanstalt was under political pressures to combine all these tasks, especially to preserve jobs as long as possible and not to close down too rapidly too many non-viable firms. In search of buyers, the agency had to enter into complicated case-by-case negotiations with the aim to achieve pledges concerning investment and employment that seemed to be appropriate. This took time and led to the delay of investment decisions. Moreover, it was expensive because the Treuhandanstalt had to take over the former debt, which was accumulated by the firms under the old regime and which no buyer was prepared to service.

All things considered, it is no surprise that German unification has become a much greater challenge than it was first expected. The rebuilding of the East German economy will take much more time than the 1989/1990 optimists predicted. Much more financial resources than even the greatest skeptics imagined have to be channeled to the East. But does this mean that reunification will not succeed? Will it just require big spending forever? Is the economic future of united Germany gloomy? Today's pessimists hold this view. My hypothesis, however, is that integration will deepen. After all, the record so far is not too bad, if one is aware of the fact that the initial expectations were overdone on the positive (Pohl, 1995; German Council of Economic Experts, 1995, pp.78-95, 185-190; 1996, pp. 71-82, 182-186). There is a considerable number of success stories at the micro-level. Many private businesses have been initiated. Barro's rule on the convergence of per capita income across regions within a country has alerted us that the speed at which income gaps are closed is relatively low; the rate is roughly 2 per cent a year (Barro and Sala-i-Martin, 1995, ch.11). Hence, the catching-up process of East Germany will take a long time (various decades, depending on the assumed growth scenarios as shown by Siebert, 1995, Table A2 and A3).

Seven Years Later

The economic transformation has so far the following results:

1) The privatization of the enterprise sector has basically been concluded within a period of four and a half years. Out of the 316 vertically and horizontally integrated conglomerates (so-called Kombinates) of the GDR economy with about four million employees, the Treuhandanstalt molded 13,800 firms, of which all but 66 were sold to private investors or liquidated by

the end of 1994. The remaining stock was transferred to a newly created holding trust of the Federal Finance Ministry, which has continued with the sales; currently, there are only 8 enterprises left (with 32,000 employees). Nowhere else in the world has privatization been as comprehensive in such a relatively short period. However, many of the privatized firms have not yet reached the break-even-point, some are currently in dire straits and others still have to put their competitiveness to the test in the markets.

2) After the initial period of output drop, real GDP in East Germany has grown at rates well above those of West Germany during the period 1992-95 (roughly 8 per cent a year compared to less than 1 per cent in West Germany). Output growth has been particularly strong in the non-tradable good sector (construction and services expanded ahead). Inflation, which first accelerated in response to the liberalization of formerly administered prices and jumped up to 13.5 per cent in 1992 (West German consumer prices: 4 per cent), has fallen subsequently to a rate of nearly 2 per cent in 1996 (which was only a bit higher than in West Germany). Per capita income in East Germany is now 55 per cent of the West German level. However, the gap between local production and aggregated demand is still considerable. This creates a permanent dependence of East Germany upon public transfers from the West.

3) The East German catching-up process seems to have run out of steam recently. Real GDP growth slowed to 2 per cent in 1996 (West Germany: 1.3 per cent). For 1997, forecasts are gloomy. This is mainly due to a needed restructuring of the construction industry which has become too large. The excessive size of this sector is reflected not only in the fact that it accounts for GDP

three times as much as West Germany's; the fast increase of investment since unification has also led to a marked oversupply of office buildings, industrial zones and retail space. The manufacturing industry, which now accounts for 19 per cent of GDP (down from almost 54 per cent in 1989), continues to grow, but at a lower pace than in previous years. It has not yet taken over as a driving force. To achieve this will require a much deeper integration into the international division of labor than reached so far (export-to-output ratio amounts only to 12 per cent in East Germany's manufacturing industry, compared to over 30 per cent for West Germany).

4) The situation on the East German labor market is catastrophic. Employment development has gone from bad to worse. Job growth has been moderate since 1992; in 1996, registered unemployment stood at 16.7 per cent of the labor force (West Germany: 10.1 per cent). This development is the most important disappointment of the adjustment process. But because East German average wages amount to almost 80 per cent of West German levels, whereas East German labor productivity just comes to half of the western one, the gap in labor unit costs, which so sharply emerged after unification, has not been closed. On average, East German labor remains significantly more expensive in comparison to West Germany labor. Under these circumstances, actual investors prefer to enforce more capital-intensive technologies than they otherwise would do (if there were a choice with regard to factor intensities); potential investors are kept off East Germany. Nevertheless, trade unions did not feel any need to reconsider their misguided wage policy.

Looking Ahead

The German unification process is being completed in a time when the western part of the economy is at the crossroads. Lately, its potential output has been growing quite slowly (by an annual rate of 1.5 per cent, compared with almost 3 per cent in the late eighties and early nineties). The degree of capacity utilization both in the economy as a whole and in the manufacturing industry remains markedly below long-term values. Whereas the West German manufacturing industry has shed 1.6 million workers in the past five years, the service sector created only 650,000 new jobs and hence was not able to completely absorb laid-off workers. There is a lack of investors' confidence in the willingness of the society to adjust to changes in demand and supply conditions on product and factor markets, especially to changes in comparative advantages between countries. Many West German companies are expanding investment and production abroad, whereas foreign firms are reluctant to come in. During the period 1991-95, German overseas direct investment amounted to DM 172 billion (4.9 per cent of total gross fixed capital formation in all-Germany), while only DM 28 billion (0.8 per cent of total investment) came into Germany.

Most German economists agree that the problem is structural to a considerable extent; business initiatives are eroded by record tax rates, high labor costs, enormous payroll taxes for financing social security and tight regulations in vast areas of the economy. Therefore, economic growth and employment creation in West Germany with the desired spill-over effects for East Germany cannot be stimulated by means of expansionary fiscal and monetary policies. All fiscal and monetary policies can and should do is to raise confidence among investors (and private households) by continuing fiscal consolidation and stabilizing expectations about the future price performance. But this is not enough. Much will depend on the overall economic policies pursued by the Federal government in the future. They have to be shaped in a coherent way and with a long-term perspective. A two-track approach is required to revive the sluggish economy and enhance non-inflationary growth of output and employment, and, at the same time, to bring eastern-oriented policies to normality (German Council of Economic Experts, 1996).

The former track consists of a vigorous and credible commitment to find lasting solutions to the deep-rooted structural problems that have been plaguing the (West) German economy for years. They have been brought up to the surface by unification. Now, as mentioned, they are menacing the country's growth potential, its capacity to generate employment and its attractiveness for internationally mobile capital under the current and prospective conditions of globalized markets. The greatest needs for action are in the following fields:

1) taxation - the tax burden has to be reduced substantially in combination with a restructuring of the tax system towards a more consumption-oriented base;

2) public spending - government consumption (including subsidies) has to be cut back, and the share of public expenditure in GDP has to be reduced at least to pre-unification levels (45.5 per cent as compared to 50 percent in 1996);

3) welfare systems - they have become excessively expensive and are no longer sustainable at given levels of benefits; the statutory systems of pensions, health insurance and unemployment insurance have to become more efficient in combination with the rising of individual incentives for making own provisions.

4) regulations - the still remaining market-entry barriers in dif-

ferent production sectors (e.g. energy, road haulage, crafts, postal services and retail trade) have to be abolished and so have the obstacles to greater labor market flexibility.

On the other track, the government should cautiously steer economic policies to bring East Germany back to normality. Investment subsidization must be reduced during the coming years. Otherwise the danger exists that East German firms will get accustomed to public financial support. As experience has shown everywhere, that will not be a promising way to put the economy on a path of self-sustaining growth. Subsidies may help to launch new activities, but they are not the panacea for East German reconstruction. To be successful, firms must rely on their own capabilities. The initial massive investment incentives (mainly fiscal grants, special depreciation allowances and low-interest credits) were intended to be phased out at predetermined dates. But viewing the difficulties which appeared during the process of reconstructing the manufacturing industry, the subsidization policy has been extended in time. The quest of normalization means that these subsidies have to be gradually reduced according to a binding time table.

To be sure, these are highly controversial issues in Germany. Powerful interest groups, in particular several trade unions, behave in a hidebound and selfish manner, just as the public choice theory predicts. Any reform policy is fraught with great difficulties in a consensual society as Germany. But there is an increasing recognition in public opinion that fundamental reforms are necessary. The political decision-making process is quite slow in Germany due to the legal powers of the Upper House of Parliament (decisions taken by the government's majority in the Lower House can be blocked there by the opposition). Nevertheless, there is some evidence that responsible politicians now understand how crucial good economic policies are for both the successful restructuring of East Germany and self-sustaining, non-inflationary and environmentally-sustainable economic growth in all-Germany. Otherwise, Germany will not be able to play a leading role in the further deepening and widening of the European Union with a single currency.

What are the Conclusion for South Korea?

In concluding, it is naturally a temptation to draw some lessons for an eventual unification process in Korea. Such an event may come at any time, either because the communist regime in North Korea collapses (as was the case in GDR) or because both countries negotiate a gradual economic integration with a view of achieving a political rapproachment in due course. Whatever the road to unification will finally be, South Korea will have to bear the burden of procuring the financial and real resources needed to rebuild a North Korean economy, which according to all available information is very backward and permeated with serious distortions (Noland, 1996). The fact that South Korea is not as wealthy as West Germany was at the time of unification (and still is today) and that it still must overcome important structural and institutional problems, if the transition to an advanced industrial country is to succeed (Cho, 1994), makes a careful approach even more compelling.

The following eight topics should be brought to the fore: First, economic liberalization must be sustained and should be rapid rather than slow. Second, conversion rates for setting up a monetary union should be based on sound economic criteria. Third, when establishing ownership in the North the principle of property restitution to dispossessed owners, rather than monetary compensation, should be ruled out. Fourth, the debts accumulated by North Korean state enterprises should be written-off. Fifth, privatization should be carried out both by direct selling of assets to Korean and foreign investors through a bidding process and by the application of voucher systems. Sixth, wage developments in North Korea should be kept in line with productivity growth. Seventh, the problem of high government borrowing requirements should be tackled from the expenditure side; government spending should be restructured in order to get resources for the North, whereas additional taxation should only be a measure of last resort. Eighth, a great effort has to be made, on the one hand, to adjust behavior of North Koreans to a decentralized system of decision-making under market conditions and, on the other hand, to convince the South Koreans of the necessary redistribution of resources in favor of the North. With all this, politicians should not generate frenzied expectations that the catching-up of the North Korean economy would be a matter of short time, that adjustment-driven unemployment will fall rapidly or that the cost of unification to be borne by the Korean society would be small.

The road to integration of the two Korean economies will be thorny. Structural adjustment pressure and pain will be considerable. In a way, Korea will suffer the same fate as Germany, because decades of economic mismanagement, inefficient resource allocation and people's de-motivation cannot be undone overnight. But in the long run the advantages shall outweigh all inevitable initial pains. The rebuilding of the Korean economy might ultimately turn out to be the less difficult challenge than Korea would have to cope with in the globalized world economy of the 21st century. In view of both a continuously increasing number of competitors on goods markets and a high international mobility of capital, great efforts are needed to strengthen the production potential of the economy. With the pursuit of good forward-looking policies, the country might share the positive welfare prospects that globalization offers.

Comments & Answer

C Professor Young-Sun Lee

First of all, I would like to say that Professor Donges' paper is a very comprehensive informative economic review of German unification. His paper begins with the "Big-Bang" approach, which describes the integration of the two Germanies. The paper includes many measures that are essential in transforming East Germany into a market-system economy, such as privatization, monetary integration, subsidizing firms and the people. The paper also points out several significant consequences of the "Big-Bang" approach. I think all of the explanations are interesting and have no doubt that we can deduce many important implications for the forthcoming Korean unification from Professor Donges' paper.

Hoping that Professor Donges can shed some light on some issues concerning the Korean unification, I want to comment on some of the points discussed in his paper.

First, Professor Donges, you suggest that we should use monetary compensation instead of restitution in establishing ownership in North Korea. In the German case, I can understand that the restitution principle caused many problems that ultimately led to the delayed recovery-process of the East German economy. I can imagine the difficulties in tracing the original owners of such a vast area. I do not believe that Germany was unaware of the extent of the problem in locating the owners, or of the resulting inefficient economic consequences. This being the case, my question is, why choose the restitution principle rather than the compensation principle? Was it because the burden of compensation was greater than that of the restitution?. Or were Germans worried that printing more money for compensation would have resulted in inflation, creating yet more problems than solutions. Of course, we do not want to follow the

German example in establishing ownership: in Korea, I do not think compensation is an ideal alternative because the financial status of Korea would be in a worse shape than in the German case. I cannot think of any effective means to finance compensation and would like to hear your views on the matter.

Secondly, you say that the 1:1 conversion rate between the two German Marks is the main reason for the collapse of the East German industries right after the monetary integration and suggest that we apply a rather economically viable conversion in the monetary integration process of the Korean peninsula. Of course, I agree that the 1:1 conversion rate of the German case was not an economic, but a politic-oriented policy. The German political leaders would have worried about the low wages in East Germany and the influx of East German immigrants, causing social and political instability in the West. As you mention in your paper, the relatively high wage level was supported by the trade union of West Germany because the West German laborers did not want to compete with low-wage laborers of the East. In fact, the West German laborers preferred to keep the wage levels rather high for a political reason; they wanted to prevent the expected migration of East laborers to the West. I think the 1:1 conversion rate has served that purpose rather successfully; by taking the 1:1 conversion rate, the Germans paid for a political benefit with an economic cost.

I think Korea will face the same situation in the forthcoming unification process. There will be even greater demand to keep the unskilled and low wage earning Northern laborers in the North, however, Korea being less socially and politically stable than the West Germany. The demilitarized zone between the two Koreas will eventually be removed during the unification process and the newly emerging issue will concern keeping the Northern labor force from leaving their hemisphere. So far, I have three ways that might discourage the mass migration:

1) Give a favorable conversion money exchange rate to the North, as the West Germans did to the East.
2) Subsidize North Korean industries, lowering the standard of living in the South.
3) Allocate North Korean properties free of charge, only if they remain in the North. The question is, which is the best choice and what are your views, if any, on the fore mentioned choices?

Finally, I understand that your paper explains various policies and their implications during the unification process of Germany. I would like to ask what the West Germans did in preparation of the unification before the whole process actually began. As far as I understand, the West German government and its people have indeed prepared for the upcoming unification, such as adopting the "Policy for East", which was declared by Brandt. Without such policies and preparations, I do not think that such a peaceful unification of Germany would have been possible; the policies and attitude of the West German government and the people have played an important role in convincing the East into abandoning its own regime and accepting the West German system. Presently, the unification process in Korea has not yet begun, but South Korea, as a whole, is reluctant to adopt the same kind of policies or attitudes as West Germany has done. Do you think that Korea can successfully achieve a peaceful unification under the circumstances? How do you suggest we prepare for a peaceful unification in the Korean peninsula before the actual process begins?

C Hong-Tack Chun (Korea Development Institute)

I would like to thank Professor Donges for sharing with us his insights on the Germany economic unification.

Dr. Donges' talk this morning consists of three parts. The first part analyzes the main causes of east Germany's economic collapse after unification. Dr. Donges points out policy mistakes such as the 1:1 conversion rate for wages, misguided wage policy and short-sighted privatization measures; in particular the principle of restitution of confiscated properties to the original owners. The second part contains the evaluation of the current state of the German economy and a proposal to resolve structural problems of the German economy. And the last part provides valuable lessons from the German economic unification for the eventual unification of Korea.

My discussion mainly addresses the applicability of some of the lessons drawn from the German economic unification to the Korean unification.

Dr. Donges draws eight policy lessons for the Korean unification from the German experience. One of the policies emphasizes that the conversion rate between North Korean currency and South Korean currency for the monetary union should be based on sound economic criteria. Another topic closely related with the choice of conversion rates is the wage policy. Dr. Donges argues that wage development in North Korea after the unification should be kept in line with productivity growth.

Although I agree with Dr. Donges' suggestion on the conversion rate and wage policy, I think more drastic measure is necessary in the case of the Korean unification. At the time of unification, per capita income in East Germany was about 30 per cent of the West German level. Seven years after the unification, per capita income in East Germany rose to 55 per cent of the West German level. If per capita income in East Germany had increased to only 40 per cent of the West German level, instead to the 55 per cent level, thanks to appropriate conversion rate and wage policy, the unit labor cost would not have risen so rapidly, thus financial burden would have been much smaller. Conversion rate and wage policy in Korea's case, however, may not be enough to mitigate the impact of unification on the Korean economy, due to huge income gap between the two Koreas.

In 1995, South Korea's GDP was approximately 20 times as large as North Korea's GDP and per capita income in North Korea was 10 percent that of the South Korean level. Income gap between the two Koreas is expected to grow even further.

Suppose the two Koreas become united at once. If the conversion rate for monetary union between the two Korea should be based on a sound economic criteria, per capita income in North Korea after monetary union would not exceed 10 per cent of the South Korean level. Given the large income gap and the integrated labor market, mass migration from the North to the South would inevitably occur. Furthermore, substantial income gap will exist for a significant period of time, if wage development in the North should be kept in line with productivity growth.

This leads us to a more drastic measure than just getting the price (conversion rate and wage rate) right to prevent mass migration from the North. We need to consider the possibility of making North Korea a special administrative zone with its own currency.

Another important lesson drawn by Dr. Donges is that privatization should be carried out by direct selling of assets to Korean and foreign investors through a bidding process and by the application of vouchers. I think the key words here are "privatization through a bidding process" and "privatization by the application of vouchers". What Professor Donges means by "privatization through a bidding process", I think, is to generate revenue as much as possible from privatization. "Privatization through vouchers" means giving away significant part of state properties to North Korean, unlike the German case in which East Germans were practically ruled out in the privatization process.

I agree with Dr. Donges that, in principle, privatization should generate substantial revenues and North Koreans should be able to acquire state properties. It is, however, difficult to devise a privatization program which ensures enough revenues and fair distribution to North Koreans; more given away to North Koreans means less revenues. Furthermore, the revenue problem in East Germany was essentially due to the fall in prices of the Treuhandanstalt properties. As long as Treuhandanstalt tries to sell a large number of firms at all once, the prices of its properties will inevitably fall. It will be the same in North Korea's case. In addition to this, most of North Korea's manufacturing facilities would be useless anyway. Therefore, it might be better to focus on fast privatization rather than revenue maximization. At the same time, a voucher scheme must be used to distribute state properties to North Koreans.

Finally, I would like to comment on a lesson from the German unification that Dr. Donges left out in his discussion. These days, we tend to overlook the efforts of the two Germanies before unification in maintaining exchanges and cooperation. Economic exchanges between the two Germanies and assistance provided by West Germany are well known. In addition, it should be noted that annual intra-German visits amounted to 10 million people a year. In 1988, for example, 6.75 million East Germans visited West Berlin and West Germany, and 5.55 million West Germans visited East Berlin and East Germany. West Germans could watch East German TV and listen to East German radio, and vice-versa. However, there is virtually no exchange and cooperation between the two Koreas, except for limited indirect commodity trade.

In conclusion, I would say that Koreans must learn a great deal not only from the German unification, but also from the intra-German exchange and cooperation before unification.

A Professor Juergen B. Donges

If I may start with the point of multilateral effort, it is difficult for me to judge. What I can imagine is that the other countries involved in this region may or may not share in the financial burden of the integration. Particularly, when the income gap is as great as has been mentioned, the burden on the current South Korean budget would be too great to bear.

By the way, Germany received some foreign aid through the structural funds of the Economic Community. Germany, being one of the net contributors to the common budget of the EC, was in principal ineligible to receive any aid. However, because its economic regions were now considered sub-standard by the EC, Germany was able to acquire the vital aid pertinent to its existence. This was an exception to the rule, but it set a precedent for others: if you can accost help from other countries or organizations, by all means, do so.

Whether W. German aid to E. Germany was helpful or not, it still remains controversial. Personally, I think it was very unsensible and unpractical, because when the aid began in the '80s, the system was too close to collapsing. The aid only accomplished in prolonging the economic system, not reviving it. Of course, this is of my own opinion and many believed that aiding E. Germany, the GDR, was an important step towards establishing a stable, politically integrated Europe.

On the point concerning W. German preparation for the unification, I must disagree. I do not believe that W. German policy prepared W. Germans for reunification. It was quite the opposite. Nobody spoke of unification in the '80s and it was not an outspoken policy. Brandt, and later Schmidt, believed that by opening to the East, Germans should accept that there exist two Germanies, a result of the new post-WWII political geography. It was believed that the Germanies should reorganize relations with Poland, Czechoslovakia, and the rest of the world as two separate nations. Everybody seemed to accept a divided Germany and nobody was prepared for the reunification, least of all, the SDP(Socialist Democratic Party). In CCP, there were some talks of unification, but it was a non-issue.

For me, the hero was Gorbachev. To be more historically precise, it was Reagan. It was Reagan and his SDI program that forced Gorbachev into seeing the reality. SU prepared for the collapse of the "Iron Curtain", because it was now able to determine that SU could not bear the burden of arms race nor any other military expenditures. Gorbachev was prepared to accept that things have changed and that it was time for the SU to change accordingly, assimilate to survive. I do not know whether there exists a problem of acceptance in S. Korea, but in order for the unification process to succeed, the people must want it. When Germany was reunited, the people readily accepted it: they were mentally prepared, though maybe not physically. Despite the mental willingness, the Germans still talk of the Eastern and the Western, showing that the Germans are only united politically and not socially. Both are necessary to have a successful union.

I agree on the issues of conversion rates, income gaps, and migration problems. Nevertheless, economics is economics. Many things can be said about afore mentioned issues, but the bottom line is, someone must pay. The idea to allow the North to "catch up" will not work for many reasons, the most important, the increase in unemployment. The unemployment rate in North Korea will be higher than ever, and of course to alleviate this problem, taxes will soar. North Korea should be somehow subsidized because of income disparity, but unfortunately, it is not an economically viable solution. If taxes in South Korea are raised, there will be outflow of investments, which results in higher unemployment rate and less GNP.

By using economic criteria, I am not saying that it must be followed in the strictest sense, but that the decision should not be made solely on the basis of improving inequalities because there are other factors to be considered.

Restitution principal was not chosen because of the heavier burden in compensation. Actually, the restitution policy was discussed originally at the negotiations of the Treaty of Unification. Money was not an issue: there were no concerns about the fiscal burden because nobody thought that there would be much. The point was that the E. German negotiators argued that it was politically unwise: many E. Germans would feel robbed of their homeland. Another valid argument concerned the Federal Republic of Germany after the WWII and its program that compensated the W. Germans for the loss of ownership in the East, including Poland and Russia. The East negotiators felt that the West have already been compensated and there was no reason to double compensate. This was the main reason for the installation of the restitution principle.

In the mean time, German parliament has repealed this law and the Germans found a compromise: adhere to the principle of restitution, but give priority to investment, not obstructing private investments in North Korea. Investment is the key in the reconstruction of economy and productive employment with high wages in North Korea. Many claims can be discouraged by giving priority to investments.

The final point deals with the problem with the conversion rate. Trade unions play an important role and in the case of Germany, there were no "western standard" in East Germany. So, the West German trade unions decided on the wage policy for the East. But, in E. Germany, there were no entrepreneurial associations as in the West that could act as a check to the demands of the trade unions. The trade unions had no counter-checking body to caution them on the wage policy. That was the problem: when choosing a conversion rate, take care to choose a generous rate that has the approval of the trade unions. If the conversion rate is generous, then implicitly, the wage is already increased, so the demand of the trade unions should be kept moderate. Personally, the ideal procedure would be wage moderation in combination with wage drift: be moderate in the steady increase of wages and allow firms to raise wages according to their competitiveness, prospects, and the qualifications of the workers.