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CO-ORDINATION AND THE STRUCTURE OF PHYSICAL AND HUMAN CAPITAL IN TRANSITION: AN AUSTRIAN PERSPECTIVE ON THE CASE OF EAST GERMANY

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The German government's approach to unification is examined. While recognizing the need for restructuring in the former German Democratic Republic, the belief of the German government had been that stimulative fiscal policies combined with a policy of raising eastern wage levels to those of the west would ease the integration of the formerly two Germanys. In short, the problem of transition was treated as a problem of insufficient aggregate demand. But the problem of transition was a problem of thwarted market adjustment and of structural discoordination. This policy failure both prolonged and worsened the adjustment process.

INTRODUCTION

When German reunification officially took place on October 3, 1990, Germans on both sides of the former border reacted with euphoria. While surely some transitional difficulties were anticipated, it was just as surely reasonable to anticipate that the difficulties of transition to a market economy would be of far less depth and duration than anywhere else in the former Soviet block. Among the least of the advantages held by the former German Democratic Republic was the fact that—despite its poor economic state as compared to Western Europe—it was probably the most prosperous of all former Soviet block countries to begin with. Far more important were the advantages resulting from integration into a strong market-oriented nation. First, being co-opted by the former West Germany, it had in place a set of workable legal institutions whereas other transitional nations had to grope and struggle to arrive at a set compatible with a market order. Second was the obvious benefit to being incorporated into a much larger economic entity that shared the same language as well as the simple benefit of greatest physical proximity to Europe's largest economy. Third, reunification meant automatic membership in the European Union, availing it to that organization's free trade area while other Eastern Block countries were impeded (until 2004) by the trade diversion effects of exclusion from the EU's preferential trade agreement. Fourth, adopting the West German Mark in effect provided the former East Germany with a fully developed capital market, and thus a tremendous head start over other transitional nations. Fifth, adoption of the West German currency combined with free trade with the former West

Germany made price reform so automatic as to be nearly unnecessary—certainly reform did not require the deliberative actions necessary elsewhere in the Eastern Block. Sixth is the nationalistic pride produced by reunification that resulted in the citizens of Western Germany being so willing at the start to sacrifice considerable wealth to accomplish the integration of the East with a wealth transfer of an order of magnitude much greater that the German Marshall Plan. This transfer exceeds 1.9 trillion US dollars, and at present continues at an annual rate of $100 billion.[1]

A decade and a half later, one is compelled to conclude that expectations have severely been disappointed. Recently, the unemployment rate for Germany has been between 10 and 12%. In the area of the former East Germany, the unemployment rate is in the neighborhood of 20%, despite substantial migration to the west of the country (Wunsch, 2005, p.7). Although Germany still enjoys a higher per capita income than the majority of EU countries since the 2004 expansion, it has sunk to very nearly the average for the 15 pre-expansion EU nations. If Germany were a US state, adjusted to purchasing power parity it would now be the fifth poorest (Bergström and Gidehag, p. 46). Employment in manufacturing in the east has particularly suffered. Manufacturing has shrunken as a percent of total employment in the entire former Soviet block. For example, between 1991 and 1998, the percent of total employment in manufacturing fell from about 29% to about 25% in the Slovak Republic, from 29% to 20% in Hungary, and from 20% to19% in Poland. Given the obsession with manufacturing in Soviet-planned economies, unguided by the price signals of a free market, this is not surprising. But in the former East Germany, the fall in employment was the most dramatic, going from 26% to less than 15% (Gros and Steinherr, 2004, p. 178).

It is the contention herein that the failure of reunification is attributable to two causes. One is the peculiarities of German labor market policy imposed on the east, combined with the one-to-one currency conversion. The second is the failure of German policy makers to recognize the discoordinating effect of their reunification policies on the structure of physical and human capital. While the former cause is at least in some circles well recognized, the latter is not, and can best be explained in terms of the Austrian economic-style concept of the structure of capital and the coordination problem.

LABOR MARKET POLICY AND UNIFICATION

That labor markets in continental Europe are relatively inflexible is a well-discussed matter, and Germany has one of the least flexible. But what precisely does "inflexible" mean in this context and why should it have impeded economic integration of the formerly two Germanys? One insight into the first question is provided in an index constructed by the OECD to rank countries in the late 1990s by their degree of inflexibility. The OECD's measure is based on the number of laws and regulations that it considered as impediments to the adjustments of labor markets to changing market conditions. These included laws that restricted firings, required severance pay, forbid temporary or fixed term employment, etc.[2] The potential scale of this index goes from zero to six, with six being the most restrictive. However, no EU countries except Portugal and the Netherlands had a higher index value than Germany at 2.8. By contrast, the lowest index value was for the US, at 0.2, and for the UK it was 1.0, by far the lowest of the EU countries.

As for the second question (about the connection between inflexible labor markets and unification difficulties), most European economists with whom I have discussed this problem are so accustomed to this inflexibility that they don't mention it as a contributing cause. They may be keenly aware of the disadvantages of relatively inflexible labor markets for Europe in general, but they don't tend to think of it in connection with the unification difficulties. Rather they attribute the difficulties of integration to the decision of the German government to impose the Mark (of the former West Germany) as the single currency of the united country and, more importantly, to permit conversion of the East German Mark to the single currency at a one-to-one rate.

Certainly, the one-to-one conversion rate was extremely generous to the residents of the former East Germany, given the purchasing power of their old currency. The Bundesbank opposed immediate currency union, and given that its objection would not be heeded, strongly opposed the generous conversion rate (Gros and Steinherr, 2004, p. 164).

Just as certainly, there were alternatives available. For one, conversion at a more appropriate rate was possible, as was the maintenance of separate currencies. And if separate currencies were maintained for some time, one could offer arguments for or against either a fixed or flexible exchange rate between the two currencies. However, in the presence of a functional, reasonably flexible, relatively free market in labor, the conversion rate wouldn't have mattered for much. The one-to-one conversion rate by itself would have created a one-time wealth transfer from west to east with little in the way of long-term consequences. It would have been much like the one-time reconstructive wealth transfers that often occur in response to natural disasters.

Far more consequential is the fact that, at the time of unification, it was the aim of both the Kohl government and the trade unions that wage levels in the former East Germany rise to those prevailing in the former West Germany. Since the German government does not directly intervene in the setting of specific wage rates, the strategy of the western unions and the collective bargaining environment and laws of Germany that made their accomplishment possible explain why wages did in fact greatly increase in the east toward western levels. Comparison of Germany with the US again puts these matters in perspective.

In the US, about 14% of workers belong to trade unions, although in the private sector the percentage is much less than that. Because in some states Right-to-Work laws permit workers to choose not to join a union even if a union represents them, the percentage of workers whose wages are determined by a collective bargaining contract is somewhat higher at 17%. In Germany, the percent of workers who are union members is significantly higher than in the US at 27%. However, the percent of workers in Germany covered by collective bargaining contracts is 92% (Nickell, et al., 2001). The reason for this large discrepancy between membership and coverage is that Germany (as does the rest of Western Europe except the UK, Ireland and the Nordic countries) also has what is referred to as an "extension law." The extension law requires that collective bargaining outcomes apply to all firms in an industry, thus effectively outlawing competition from non-unionized firms or variation across regions. In this manner, the government and trade union desire for wage convergence between east and west was almost automatically set in motion. Had productivity levels been nearly the same in the

former two Germanys, the labor market disequilibria forced on the east would not have been so great. While it is of questionable accuracy to attempt to determine productivity in a socialist economy where prices do not convey the same signals as in a predominantly market economy, some attempts nonetheless have been made to determine pre-unification productivity in East Germany. Van Ark (1994) estimated that, three years prior to unification, labor productivity in East German manufacturing was about 28.6% of that of West Germany. Estimates of post-unification productivity differentials vary considerably, but tend to show substantial improvement relative to the west of Germany over time. Wunsch (2005, p.7), using OECD data, indicates that productivity in the area of the former East Germany was less than a third of that in the area of the former West Germany in 1991 and had risen to slightly below 70% by 2002. Moreover, over the same period average wage levels in the east rose from about 56% to about 81%. These figures do not control for differences in industry mix; if they had, owing to the extension laws they would have indicated a much greater degree of wage convergence. The fact that wages rose, but less rapidly than productivity, would seem to result in a lessening of the degree of forced disequilibria over time. But as nominal wages in the east were rising, product prices were falling. According to one calculation, prices received by producers in the east fell by about 40% on average between 1990 and 1992 alone, resulting in a more than tripling of the real wage that matters to producers. The resulting unemployment exhibits cause-and-effect patterns similar to those of the forced labor market disequilibria that Galloway and Vedder (1987) demonstrated for the extreme prolongation of America's "Great Depression".

If the result of the policy of a single wage for the unified country has been so damaging to the east of the united Germany, it is puzzling as to why it became, and persisted as, policy. The suggestion that policy makers were simply ignorant of the laws of demand and supply is too easy an explanation, though perhaps not totally groundless. After all, German economists have much less influence over policy than economists in the rest of Western Europe. Also, many in Europe, including some economists, still subscribe to the archaic "economy of high wages" perspective, in which high wages raise aggregate demand and thus employment, deriding as "neo-liberals" all who understand that the laws of supply and demand apply to labor markets as well as other markets, and who thus see labor market rigidity as a problem in need of reform.

While such ignorance may provide a partial explanation, other explanations seem more consistent with self-interested behavior. For instance, there is the "Insider-Outsider Theory" of Lindbeck and Snower (1986, 1988, 1990). In brief, this approach posits that union officials disregard the welfare of the unemployed (the "outsiders") in using their wage setting power. It is the behavior of the unions of the former West Germany that dominate the wage setting process in the east, and it may very well be that—to the union leadership—even employed members in the former East Germany are treated as outsiders as the leaders attempt to preserve employment of their western members.

Paquè (1999) offers a more charitable explanation. According to Paquè unions in the former West Germany have religiously adhered to the philosophy of the Principle of Equal Pay for Equal Work (PEPEW), since long before unification. He points out that regional variation in pay within West Germany was always very small, despite substantial variation across West German regions in unemployment. Since the German

federal government has always had a policy of substantial fiscal transfers to lagging regions, the unions have left to the federal government the responsibility of mitigating the effects of regional disparities. Despite whatever inefficiencies might have been caused by the combination of union wage policy and government fiscal policy, West Germany nonetheless prospered for a long time relative to its European neighbors.

This explanation is less than totally convincing, as whatever might have been true in the past, the united Germany is *not* prospering relative to its neighbors. In the past, the fact that West Germany's relative prosperity permitted union leadership to get by with a job-destroying philosophy does not explain why the circumstances of the last 15 years have not brought pressure to bear to change that philosophy. "Inertia" is not an answer; it only raises the question of why the inertia. So the matter of why the situation of Germany is so readily tolerated by its populace remains difficult to answer. One thing that has made the unemployment in the east more tolerable to the unemployed is the generosity of its unemployment compensation and other income support programs, which are the most generous in Europe, and are at a level that never could have been supported by the level of economic activity in the former German Democratic Republic. In as much as such transfers are generous throughout northern continental Europe (as compared to the US, the UK and Ireland) they explain the presence of "hysteresis"—the ratcheting up of unemployment with successive business cycles—in those countries (Blanchard and Wolfers, 2000). In Germany, those unemployed longer than a year have in recent years constituted over 50% of the unemployed, whereas in the US the comparable figure tends to be around or below 10% (Baldwin & Wyplosz, 2004, p. 428).

It bears repeating that the inefficiencies associated the rigidity of European labor markets, particularly in Germany, are well recognized among economists, one excellent example being Siebert (2005). The controversial Lisbon Agenda is aimed at invigorating the economies of the European Union, mostly through product and labor market reform. The main motivation for the Agenda is an expressed goal of "catching up" with America, and even among some advocates of its suggested reforms it is seen as necessary, but something of a necessary evil at that. But the Lisbon Agenda (European Commission, 2000) is only a paper document. It is up to the individual nations to reform their institutions, and in fact Germany, though making meager progress, has made better progress than most (Duval & Elmeskov, 2005). However, the opponents of reform are strong, deriding the Lisbon Agenda, as "neo-liberalism"—the favored pejorative of the opponents. Against the push for labor market reform is an opposing push by Social Democrats, who control the governments of most of Europe, to turn the European Union into the instrument for imposing the institutions—"harmonization" to prevent "social dumping" in the jargon of the day—of the least flexible nations such as France and Germany upon the EU as a whole (Baldwin & Wyplosz, 2004, pp. 442-448).

TRANSITION AND THE RESTRUCTURING OF CAPITAL

The peculiar mix of labor market institutions and behaviors explains much but not all of the depth and duration of the failure of the integration effort in Germany. There was never any popular denial of the fact that the physical capital stock of the former East Germany, along with the structure of labor skills that accompanied it, would have to be geared toward producing goods and services other than those it had been producing

under socialism. But the tendency had been to see problems of conversion as easily overcome, and later to see the fact that that they have not been so easily overcome as a problem of insufficient aggregate demand, e.g. Peter Bofinger (2004).[3] What tends to be unappreciated is the fact that the fiscal transfers meant to speed transition have actually prolonged the transitional period. The biggest part of the recognition problem is that both free market and social market economists tend to view capital from the neoclassical perspective of homogeneous capital for which structure doesn't matter. This is the conception of capital in which it is thought legitimate to aggregate capital into a Cobb-Douglas-type economy-wide production function and Solow-type growth model with no concern for the degree to which the pieces of the capital structure are coordinated with one another. In this perception, capital is easily transferred from one production process to another. In the more modern versions of capital theory associated with Kirzner (1966) and Lachman (1978), capital is seen as highly (but not totally) specialized, with the most important feature characterized by the complementarity of the various parts of its structure more so than their substitutability. The logic of that structure depends on the extent to which its various parts are coordinated—with the plans of independent entrepreneurs controlling various stages of the structure, with the instantaneous and intertemporal patterns of consumer demands and time preferences, and with the structure of human capital complementary to it. Capital may be more like putty before it is put into place, but after that it is more clay-like. To a lesser but still important degree, so too is human capital (Bellante, 1983).

In a functioning market economy, that structure undergoes continuous change as part of the ongoing processes of discovery and adjustment. But discovery involves a trial-and-error process, since as Lachman suggested, the future is imaginable but not knowable.

The restructuring of the former East Germany was not left to a working out of the discovery process—the normal risk-taking of profit-seeking entrepreneurs who put their own well being at stake in their decision making.[4] Rather, the process of adaptation to a market economy was put in the hands of a government agency, the Treuhandanstalt, which thus became the temporary owner of over 8000 firms. Its objective, besides selling off or as a last resort liquidating these firms, was to do so in a way that would minimize resulting unemployment. Interestingly, THA was given the task of restructuring firms first, and privatizing later.[5] How it would be possible to "restructure" and only then subject the firm to the discipline of the marketplace is a mystery. Much of that restructuring involved breaking existing firms into smaller pieces in the interest of inducing competition. This is a task for which a bureaucracy cannot possess the relevant information, but which the market process readily handles in a private economy, e.g., Manne (1965) and Jensen (1988). It is impossible to know what form a firm should take, what and to whom it should sell, what its optimal size is and how it should produce whatever it ends up producing, without first entering the market economy. Further, a large part of the restructuring expense involved raising the eastern firms to the level of environmental standards applicable by law to West Germany. Ownership was opened to offers, with successful buyers required to guarantee a contracted amount of employment and investment spending, obviously before the optimal amounts of either could be determined. While most firms were sold to West German firms, THA did

encourage buyouts by former East German managers of the firms. THA faced the greatest political difficulty in handling firms that simply could not be sold, and with its soft budget constraint continued to subsidize the losses of such firms, as well as the losses of saleable firms until they were sold. Eventually, almost a third of the original firms were liquidated, and THA finished its job at the end of 1994 with a debt of around DM 270 billion.

Given the hand-tying operation of THA, its effects have outlasted the agency itself. During its tenure and after, the completion of the purging of malinvestment and market-induced restructuring that is a familiar part of Austrian capital theory was thusly postponed. Besides the actions of THA, the German government, apparently in the belief that a fiscal stimulus can solve all problems, made so-called infrastructure investment a major component of its unification program, though infrastructure was among the least of East Germany's deficiencies. While doing so may have temporarily kept employment higher than it otherwise would have been, the resulting configuration of the capital structure further contributed to the length of time necessary for adjustment of its structure to the requirements of a market economy.

While for heuristic purposes expositions of Austrian capital theory treat labor as homogeneous (e.g. Hayek, 1935), in advanced economies human capital also exhibits a high degree of specificity. The above-mentioned actions of THA and the German government resulted in a structuring of skills that is inappropriate to the ultimate structure of production, and added to the costs of restructuring malinvested physical capital. Even if full employment is eventually achieved, much of human capital investment will be less than optimal in relation to the corrected structure of production, and real standards of living are reduced because time and resources are used up in the production of human capital that was only temporarily in demand (Bellante, 2005). Further, much of Germany's unification expenditure has been on what is termed "active labor market policy," a large part of which is specific skill training. But until the genuine skill requirements of a market-determined structure of production are revealed, much such training will be a resource diversion.

CONCLUSION

While for a time it appeared as though the German population had exhausted its patience with Germany's problems and was ready for genuine reform, the indeterminate outcome of the 2005 election suggests otherwise. Although the newly-elected Chancellor Angela Merkel campaigned on a promise of regulatory reform and tax reduction, the "grand coalition" that resulted from the indeterminacy of the election produced an agreement that effectively conceded the reform argument to the Social Democrats: Tax raises and a stimulative spending package were agreed upon, but labor market reform became a dead issue.

What were described in the introduction as the six advantages perceived to favor the transition of the former East Germany have turned out not to be so advantageous after all. Unification with the Federal Republic of Germany has instead saddled the east with a set of laws and institutions governing labor and product markets that have severely impeded transition, as has the German government's approach to the privatization of former GDR firms. As James Dorn (2004, p.446) has said about transition

in general,

> As long as the state controls property or regulates market prices, the information, incentive and allocative functions of the price system will fail to operate. The fatal conceit is to think that post-communist governments can plan the transition to a private free market. Rather, what they must do is to get out of the way and let voluntary exchange, under the rules of just conduct, prevail to establish economic and social harmony.

The German government has chosen to do otherwise.

Despite rather poor recent economic performance and high unemployment rates the economies of Western Europe, including Germany, continue to enjoy standards of living that are only dreamt of by most of the world's population. Germany's *per capita* income is, for example, about ten times that of India. But the nations of Western Europe became rich capitalist economies first, and then particularly after World War II restricted further wealth creation by expanding the welfare state. Germany especially experienced a burst of growth following WWII that is often described as the "German Miracle." The policies then set in place by its Economics Minister and later Chancellor Ludwig Erhard, which re-established a market economy after the economic management of Nazism, are largely responsible (Reichel, 2002). Erhard himself created the term "social market" for the reforms that he introduced to supplement the long-established social security institutions of Germany. With the end of the Erhard era in 1966, Germany, like the rest of Western Europe, gradually but greatly expanded its matrix of welfare systems and protective legislation, its codetermination provision being one important example. And the consequence has been that with each European recession, recovery results in a higher rate of residual unemployment. The term "social market," as it is currently used in Germany, eventually came to imply something quite opposite from what Erhard meant.

But the luxury of the welfare state survives in its parasitic relationship with the wealth-creating private sector at the cost of high unemployment and a material standard of living reduced below what it could be. Had the rapidly advancing economies of Asia installed welfare states first, it is unimaginable that they would have achieved what they have to date. That imposition of the social market policies of the prosperous west of Germany on its east demonstrates the dangers of overburdening the productiveness of the private sector. The intellectuals of Continental Europe, including those of Germany, believe that their populations have deliberately made a choice to eschew the Anglo-American model and to choose security even if it costs something in the way of prosperity (Baldwin and Wyplosz, 2004, p. 445-449). This rationalization confuses a choice with a constraint. The lesson for the rest of Western Europe from the German experiment in transition is that—if tortured enough—the golden goose of the market, even if not killed, can be severely wounded.

NOTES

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1. See http://en.wikipedia.org/wiki/German_reunification#Effects_of_reunification.

2. The table of index values is available at www.dol.gov/ilab/media/reports/oiea/chartbook/chart21.html.
3. Paquè (1999, p.278) points out the logical inconsistency of the demand deficiency diagnosis, as well as the popularity of it.
4. Much of the factual information reported in this paragraph derives from Gros and Steinherr (2004, pp. 173-177.
5. Alternative, preferred approaches to privatization were of course available. A discussion of such is beyond the intended scope of this paper, but see Dorn (1994) and Zygmont (2004).

REFERENCES

Baldwin, R. and C. Wyplosz (2004), *The Economics of European Integration*, McGraw-Hill Education (UK), Berkshire.

Bellante, D. (1983), "A Subjectivist Essay on Modern Labor Economics," *Managerial and Decision Economics*, Vol. 4, No. 4, 234-243.

Bellante, D. (2005), "Austrian Theory in the Area of Labor Economics," in J. Backhaus, ed., *Modern Applications of Austrian Thought*, Routledge, London, 197-206.

Bergström, F. and R. Gidehag (2004), *EU vs. USA*, Timbro, Stockholm.

Blanchard, O. and L. Summers (1986), "Hysteresis and the European Unemployment Problem," *NBER Macroeconomics Annual*, vol. 1, Cambridge, Mass: MIT Press, 15-77.

Blanchard and J. Wolfers (2000), "The Role of Shocks and Institutions in the Rise of European Unemployment," *Economic Journal*, Vol.110, No. 462, 1-33.

Bofinger, P. (2004), *Wir Sind Besser Als Wir Glauben* [*We Are Better Than We Think We Are*], Pearson Studium, Munich.

Dorn, J., (2004), "The Collapse of Communism and Post-Communist Reform," in P. Boettke, ed., *The Elgar Companion to Austrian Economics*, Edward Elgar, Hampshire, 44-447.

Duval, R. and J. Elmeskov (2005) "The Effects of EMU on Structural Reforms in Labour and Product Markets," Paper presented at European Central Bank Conference: *What Effects is EMU having on the Euro Area and its Member Countries?* Frankfort, June 16-17.

European Commission (2000), "The Lisbon European Council—An Agenda for Economic and Social Renewal of Europe" *Document / 00 / 7*.

Galloway, L. and R. Vedder (1987), "Wages, Prices, and Unemployment: Von Mises and the Progressives", *Review of Austrian Economics*, Vol. 1, No. 1, 33-80.

Gros, D. and A. Steinherr (2004), *Economic Transition in Central and Eastern Europe: Planting the Seeds*, Cambridge University Press, Cambridge.

Hayek, F. (1935), *Prices and Production*, Augustus M. Kelly, New York.

Jensen, M. (1988) "Takeovers: Their Causes and Consequences, "*Journal of Economic Perspectives*, Vol. 2, No. 1, 21-48.

Kirzner, I. (1966), *An Essay on Capital*, Augustus M. Kelly, New York.

Lachman, L. (1978), Capital and its Structure, Institute of Humane Studies, Menlo Park, Cal.

Lindbeck, A. and D. Snower (1986), "Wage Setting, Unemployment, and Insider-Outsider Relations," *American Economic Review*, Vol. 76, No. 2, 235-239.

——(1988), "Cooperation, Harassment, and Involuntary Unemployment: An Insider-Outsider Approach," *American Economic Review*, Vol. 78, No. 2, 167-189.

——(1990), "Demand- and Supply-Side Policies and Unemployment: Policy: Implications of the Insider-Outsider Approach," *Scandinavian Journal of Economics*, Vol. 92, No. 2, 279-305.

Manne, H. (1965), "Mergers and the Market for Corporate Control," *Journal of Political Economy,* Vol. 73 No. 2, 110-20.

Nickell, S., L. Nunziata, W. Ochel and G. Quintini (2001), "The Beveridge Curve, Unemployment and Wages in the OECD from the 1960s to the 1990s", *London School of Economics, Centre for Economic Performance, Discussion Paper* 502.

Paquè, K., (1999), "East/West Wage Rigidity in United Germany: Causes and Consequences" in M. Siebeck, ed., *Structural Unemployment and Real Wage Rigidity in Germany, University of Kiel, Kiel Study 301.* 271-315.

Reichel, R. (2002), "Germany's Postwar Growth: Economic Miracle or Reconstruction Boom?" *Cato Journal*, Vol. 21 No. 3, 427-442.

Siebert, H. (2005) *The German Economy: Beyond the Social Market*, Princeton University Press, Princeton, N.J.

US Department of Labor (2005), *Labor and Product Market Flexibilities*, Chart No. 21.

Van Ark, B. (1994), "Comparative Productivity in East and West German Manufacturing Before Reunification", *London School of Economics, Centre for Economic Performance, Discussion Paper* 895.

Wunsch, C. (2005), "Labour Market Policy in Germany: Institutions, Instruments and Reforms since Unification", *University of St. Gallen Dept. of Economics, Discussion Paper* 2005-06.

Zygmont, Z., (2004), "Privatization," in P. Boettke, ed., *The Elgar Companion to Austrian Economics*, Edward Elgar, Hampshire, 448-454.