

Eastern Germany and the Conflict between Wage Adjustment, Investment, and Employment: A Numerical Analysis

By

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Contents: I. Introduction. – II. The Extended Model of Investment. – III. Specification of the Model to Eastern Germany. – IV. Numerical Solution of the Extended Model. – V. Results of the Numerical Solutions of the Model. – VI. Conclusions. – Appendix.

I. Introduction

Despite four years of active restructuring and enormous support from western Germany, the overall level of economic activity in eastern Germany is still low and has a long way to go to catch up with the west. In 1994, productivity in eastern Germany, measured in terms of gross domestic product (GDP) per capita, reached roughly 46 per cent of that in western Germany. For 1995, estimates point at a relative productivity in eastern Germany of 50 per cent. Official unemployment in the region is 13 per cent (January 1995), but the level of effective unemployment – including state-paid training, job creation programmes and short-time work – is 21 per cent.¹ At the same time, average nominal wages, which have increased since 1990 by roughly 170 per cent, were about 75–80 per cent of the western level in 1994. As long as the gap between productivity and wages persists, and as long as effective unemployment is as high,

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¹ Bundesanstalt für Arbeit (1995). On top of that, over 600,000 people are commuting on a daily or weekly basis from eastern Germany (including former East Berlin) to western Germany (including former West Berlin) to work (Infratest Sozialforschung 1993; estimates for 1994).

massive capital transfers from western Germany will be necessary. These transfers were more than 50 per cent of the east German GDP in 1993 and more than 5 per cent of the west German GDP.² Government officials, who were initially optimistic about how long it would take for economic activity in eastern Germany to catch up, now openly state that the massive transfers will not be reduced substantially before the end of the decade.

What is the cause of this dilemma? There are exogenous and endogenous reasons. The main exogenous reasons are the bad physical condition of the productive capital stock, which turned out to be much worse than expected initially, and the dismantling of the Council for Mutual Economic Assistance (CMEA) regime, which caused a breakdown of east European markets for east German firms. The key endogenous reason has been the wage strategy chosen in eastern Germany. The adjustment of the wages was negotiated in 1990/91 when the prospects for eastern Germany to catch up quickly still seemed bright. At that time, when nominal wages were at a level of 30–35 per cent of that in the west, unions and employers agreed upon a four-year stepwise adjustment of eastern wages to western levels.³ When GDP fell by over 30 per cent in 1991, making the disastrous condition of the east German economy obvious, it became clear that the adjustment of wages would have to be postponed. However, a lengthy postponement was not possible for political reasons since this could have caused politically undesirable migration and prolonged substantial discrepancies between working and living conditions in the two parts of Germany. An agreement was therefore struck that foresaw the full adjustment of wages by mid-1996.

While the negative effects of this wage strategy on the level of employment were obvious, the extent and duration of unemployment have surprised most analysts. Thus, the wage policy and possible government corrective measures are still key issues in the debate about developments in eastern Germany. A selection of the chapter titles on wage policy of some monographs suffices to convey an impression of the general perception of the wage policy in eastern Germany: *The corruption of the labour market – what government and unions should*

² In 1993, GDP in eastern Germany was DM 273 billion (= 10⁹); in the same year, the region received DM 140 billion of net transfers (Bundesministerium für Wirtschaft 1994).

³ See Schatz and Schmidt (1992) and Paqué (1993) for a discussion of the general wage policy in eastern Germany, and Burda and Funke (1993a) for a discussion of the particular role of the trade unions in this process.

keep in mind (Hankel 1993, translated from German editions); *Revaluation effect and wage expansion: impediments to transformation* (Schiller 1994); *Employment, labour market and wage policy: wage policy as jobkiller* (Siebert 1992); *The high-wage high-tech strategy: employment forbidden!* (Sinn and Sinn 1992). In addition to their negative effects on employment, the high labour costs are seen as detrimental to the investment process. The volume of investment, however, is a variable of crucial importance for eastern Germany; productivity and/or employment will not be equalized in a self-sustained way – i.e., without direct transfers from western Germany – without adjustment of the capital stock.

In this paper, we want to shed some light on these issues. The aim is to complement the discussion on east German transformation by estimating the cost of the chosen wage strategy in terms of less investment and lower employment. We focus on the dynamic conflict between wages, investment and employment by presenting an extended adjustment cost model of investment (Section II).⁴ The model is specified according to the east German economy in Section III. Section IV outlines the numerical solution method. Section V gives the numerical results for eastern Germany, which – at least roughly – quantify the tradeoff between wage adjustment, investment and employment. Section VI concludes the paper.

II. The Extended Model of Investment

The model is that of a representative firm in eastern Germany that maximizes the present value of all future cash flows. The cash flow in each period is revenue net of costs. In the standard investment model, these costs consist of the wage bill, the purchasing costs of investment and the installation costs for the new capital.⁵ In this model, we want to assume that the firm also has to incur “revision costs” when it wishes to revise its level of investment, i.e., change the level of investment from one period to the next. This extension is justified as follows. The idea underlying the standard investment model is that the capital stock K is fixed in the short run and that changing it over time \dot{K} involves the costs $c(\dot{K})$ that are increasing with the size of the

⁴ The relevance of using such a type of model to study the dynamics of transition is outlined in Van Long and Siebert (1992).

⁵ The introduction of installation costs goes back to Eisner and Strotz (1963), Lucas (1967) and Gould (1968); for a textbook exposition see Blanchard and Fischer (1989, pp. 297 ff.).