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EU Enlargement: Challenges for Germany's New Laender

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EU Enlargement: Challenges for Germany's New Laender

Abstract:

EU enlargement offers significant welfare gains to old and new member states. However, these welfare gains do not come automatically but have to be earned by appropriate adjustments in domestic policies. This is particularly relevant for Germany’s New Laender, which could benefit from the proximity to the new EU member states in Central and Eastern Europe but which also suffer particularly from inefficient institutions in Germany. Welfare gains will only be realised if wage adjustment is flexible. Instead, the German welfare system implicitly creates downward rigid wages. Without appropriate social policy reforms, the competitive pressure and the mobility of capital will destroy jobs in the New Laender. The paper shows the potential benefits and risks of economic integration in a simple partial equilibrium setting with flexible and rigid labour markets, respectively. We also discuss the entrepreneurial willingness and ability in the New Laender to adjust to the changing competitive conditions after EU enlargement.

JEL-Classification: F2, H5, J3

Keywords: EU enlargement, labour markets
1 Introduction

At first sight, the debate on EU enlargement in Germany is confusing. On the one hand, experts – academics, politicians and journalists – stress that Germany will be the main beneficiary from EU enlargement. In particular, the New Laender seem to be the perfect candidates for gains from market integration: regional proximity, a long tradition of trade relations and large differences in factor prices. On the other hand, there are a lot of warning signs even from strictly market oriented economists that EU enlargement may cause a loss of jobs in Germany. Investment and jobs in the New Laender may move further East, leaving a Mezzogiorno region in Germany for a long time.

This contribution will shed light on these seemingly contradictory views. We argue that Germany’s ability to gain from EU enlargement will mostly depend on labour market flexibility. Standard economic theory of international trade assumes flexible price and wage adjustments. With flexible wages, a country can gain from trade and economic integration. Countries use their comparative advantages to their mutual benefits. The outcome is quite different, however, when labour markets cannot adjust to the new environment. From the German point of view, EU enlargement implies that labour-intensive economies join the common market. This creates pressure on German (low-skilled) wages. If the institutional settings, such as wage bargaining and welfare payments, prevent the necessary adjustments in the market, the gains from trade are replaced by job destruction.

Not to be mistaken: We do not question EU enlargement per se. We merely wish to point out that the gains from integration can only be realised with flexible markets. And concerning labour markets, Germany’s New Laender have still a stony road ahead.

In Section 2, we briefly review some of the major economic trends in the New Laender over the past decade. The insufficient labour market flexibility is already a major obstacle to sustainable development in the New Laender, which will even be aggravated in the surge of EU enlargement. Section 3 shows the potential benefits and risks of economic integration in a simple partial equilibrium setting with flexible and rigid labour markets, respectively. In Section 4, we discuss the entrepreneurial willingness and ability in the New Laender to adjust to the changing competitive con-
ditions after EU enlargement. Section 5 shows that demographic change creates an additional challenge for the New Laender as it weakens their comparative advantage in skill-intensive production. Section 6 draws some conclusions.

2 Fundamental Economic Trends in Germany’s New Laender

In many areas, German unification has eliminated the huge differences between East and West Germany. For instance, the quality of housing, shopping opportunities, the media landscape, preservation of historic districts are similar in both East and West. Compared to other transition countries, East Germany pursued a steep convergence path – thanks to the massive transfers from West to East. There is, however, one important area where convergence lags far behind: the economy.

Some optimistic observers often stress the steady productivity growth in East Germany (Figure 1). Indeed, labour productivity per employee in East Germany has increased from €15,410 in 1991 to €42,086 in 2003. In the last few years, productivity growth has somewhat slowed down but is still positive.

Figure 1: GDP per Employee in the New Laender

Unfortunately, the productivity figure is completely misleading. Labour productivity can increase either because each worker becomes more productive or because less productive jobs are eliminated. In Germany, the second alternative has applied. Figure 2 shows GDP per active population rather than per employee. Until the mid-1990s, East German GDP was converging towards West German levels. Since 1996,
however, the convergence process has come to a halt. The constant and partly increasing gap to West German GDP can clearly not be attributed to high German growth rates. West Germany also experienced only moderate growth in these years.

**Figure 2: GDP per Active Population in the New Laender**
(West Germany = 100)

![GDP per Active Population in the New Laender](image)

Source: Ifo Institute, own calculations.

The main reason for East Germany’s sluggish economy is the steady loss of jobs. Fewer and fewer workers contribute to East Germany’s GDP. Figure 3 shows employment in the Old Laender and in the New Laender. Employment in the Old Laender has moved with the business cycle but, on average, has been fairly stable. In contrast, the New Laender have seen a steady decline in employment. Between January 1994 and January 2004, employment dropped by about 20 %.
The dramatic decline in employment can be traced back to the early 1990s. In the process of German unification, many West German institutions were introduced in the New Laender, which were already suffering from the Socialist heritage of technical inefficiencies. Wages were increased to near Western levels and Western standards on safety, pension entitlements, unemployment protection, co-determination rights or tenure laws were introduced. Hence, East German jobs were almost immediately subject to nearly the same wage costs as jobs in West Germany. East German labour costs rose from 7% of the West German level in 1989 to 64% in 2001. As a consequence, many jobs were lost and unemployment increased rapidly.
Today, the welfare system (social assistance and unemployment benefits) prevents wages from downward adjustments, and collective wage bargaining leads to wage compression. These two factors have created massive unemployment predominantly among low-skilled workers, as Figure 4 shows. Unemployment rates for the high-skilled are low and more or less the same in East and West Germany. For the low-skilled, however, the East-West gap is significant. The unemployment rate among workers without vocational training reaches 50 percent in the New Laender. With such massive unemployment, wages for the low-skilled should adjust downwards to bring the labour market back to equilibrium. Without policy reforms, however, wages for the low-skilled workers cannot fall below the current level. Welfare and unemployment benefits create an implicit minimum wage. The labour supply for job offers with lower wages is non-existent.

3. Flexible and Rigid Wages

The new EU members possess a major advantage in having relatively low labour costs. While labour costs per hour in the West German manufacturing sector amounted to over € 31 in 2002, they were below € 10 in all the new member states and even down to € 1.23 in Bulgaria (see Figure 5). East German labour costs are below West German levels but still far above the new EU member states.
Such large factor price differentials also offer gains from trade and profitable investments for ‘old Europe’. Foreign direct investment in the Central and East European EU accession countries has reached considerable levels. The inward FDI flows into these eight countries amounted to $2.3 bn in 2002; the inward FDI stocks more than quadrupled from $31.3 bn in 1995 to $134.2 bn in 2002 (UNCTAD 2003). The literature on FDI stresses proximity to markets and factor price differentials as the two main motives for carrying out FDI (Brecher and Feenstra 1983, Brenton, Di Mauro and Lücke 1999 and Caves 1982). These two motives also dominate the FDI of German firms in the Central and East European EU accession countries. In an Ifo survey of more than 1,000 German firms, 70% of the firms mentioned low labour costs as a prominent reason for investment in these countries (see Figure 6).¹ The benefit of lower wages even dominates the closer distance to the markets, which influenced investment decisions in 47% of the firms. Furthermore, one third of the firms mentioned the low tax rates, compared with Germany, as an important motive for investment. According to a recently conducted analysis, the average effective tax burden for firms reaches 21.3% in the accession countries, whereas it amounts to

¹ Ifo survey exclusively conducted for Wirtschaftswoche, see Handschuch (2004).
36% in Germany (Ernst&Young 2003 and Handschuch 2004). Finally, 28% of the firms reckoned that lower regulatory burdens make Eastern Europe attractive for FDI.

**Figure 6: Motives for Investment of German Firms in Eastern Europe**

<table>
<thead>
<tr>
<th>Motive</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low labour costs</td>
<td>70%</td>
</tr>
<tr>
<td>Distance to markets</td>
<td>47%</td>
</tr>
<tr>
<td>Low tax rates</td>
<td>33%</td>
</tr>
<tr>
<td>Less regulation</td>
<td>28%</td>
</tr>
</tbody>
</table>


In German public opinion, these investments – often associated with relocation of production activities – are frequently seen as a threat to the economic viability of West European regions.\(^2\) With competitive goods and factor markets, however, these fears are unfounded. The relocation of activities is not only beneficial for individual firms but also generates welfare gains for the country as a whole. With flexible labour markets, the capital-exporting country also gains from investment abroad.\(^3\) The potential welfare gain for the capital-exporting country can be shown in a simple partial equilibrium framework.

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\(^2\) A similar debate was recently triggered in the US by Gregory Mankiw, President Bush’s chief economic adviser, when arguing that the outsourcing of jobs has probably net beneficial effects on the economy in the long run; see Davis, Schroeder and Aeppl (2004).

\(^3\) We neglect distributional issues here. The necessary adjustment makes capital owners and high-skilled workers better off at the expense of (low-skilled) workers.
Figure 7: Welfare Gains from FDI

Figure 7 shows the marginal productivity of capital in Germany (D) and Poland (PL). The distance $0_D 0_{PL}$ on the horizontal axis measures the total available capital in both countries. The amount of capital in Germany is measured from left to right, the amount of capital in Poland from right to left. The initial distribution of capital is given by $K$ ($0_D K$ in Germany and $K 0_{PL}$ in Poland). Before FDI takes place, the marginal product of capital in Poland (A) exceeds the marginal product in Germany (B) reflecting the profitable investment opportunities.

The high marginal product gives entrepreneurs an incentive to relocate capital to Poland. In the long-run equilibrium, the marginal products of capital are equalised (C). The foreign direct investment in Poland amounts to $K^*$. This FDI flow to Poland is beneficial for Germany as total income increases. Before FDI takes place, German income amounts to $DB K 0_D$. After having invested $K^* K$ in Poland, German income consists of the income $DCK^*0_D$ earned at home plus the capital income $CEK^* K^*$ from the FDI in Poland. Hence, total income has increased by $CEB$. Of course, this welfare gain goes along with a redistribution of income from workers to capital owners.

Assuming two factors (capital and labour) and constant returns to scale, labour income in Germany can be measured by the area $DBF$ in the initial situation. With the relocation of capital, labour income in Germany falls to $DCG$.

It is important to point out that the welfare gains can only be realised if we allow this redistribution between factor incomes to happen. If wages cannot adjust to the new

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4 Total welfare gains for Poland and Germany together amount to $ABC$. 

9
conditions, the country as a whole will suffer unemployment and lose from EU enlargement. The importance of labour market flexibility for the realisation of welfare gains is often neglected. We briefly illustrate the point – again using a simple diagrammatic approach. In Figure 8, we use the same model as before but show the marginal productivity of labour (instead of the marginal productivity of capital).\(^5\)

![Figure 8: Rigid Wages and Unemployment](image)

The horizontal axis measures the available labour force in Germany and Poland. Labour is immobile; the distribution of labour is given by \(\bar{L}\). With the initial distribution of capital, the marginal productivity of labour in Germany and Poland is \(f_L^D(K_1^D)\) and \(f_L^{PL}(K_1^{PL})\), respectively. Wages are paid according to the marginal product with full employment in both countries: \(w_D\) and \(w_{PL}\). Germany is the high-wage country.

FDI leads to a relocation of capital from Germany to Poland, thus shifting the marginal product of labour curve in Germany downward and in Poland upward (point C). With flexible wages, the equilibrium would be reached with the wage rate \(w_{flex}\) in both countries.

If Germany seeks to remain a high-wage country and prevents wages from falling, even more capital will be relocated from Germany to Poland. The marginal productivity curves will shift even further downward in Germany [to \(f_L^D(K_3^D)\)] and further upward

\(^5\) The basic result also holds in more complex settings such as a Hecker-Ohlin model with wage rigidity; see Brecher (1974) and Davis (1998). We owe the idea to Seidel (2004) of discussing the impact of EU enlargement with rigid wages in a single-good, two-factor model.
in Poland \([f^{PL}_L(K^{PL}_L)]\). In the long-run equilibrium, wages are equalized again, however at the high German wage rate. Poland has full employment at these wages (point A), whereas Germany suffers from unemployment. German employment is determined by labour demand in point D \([f^{D}_L(K^{D}_L) = \bar{w}_0]\), which remains below the labour supply \(\bar{L}\). Germany defends the high wage rate at the cost of inefficient unemployment (AD).

Downwardly rigid wages are a relevant scenario for Germany. As we have shown in Section 2, unemployment is predominantly skill specific and is caused by the welfare system that creates an implicit minimum wage. Due to the lower labour productivity in East Germany, this implicit minimum wage is binding for a larger share of workers there. If the (East) German economy cannot adjust its wages downwards for the low- and medium-skilled workers, the potential gains from EU enlargement cannot be realised. German welfare may even decrease due to an increase in unemployment. This is not to say that EU enlargement was the wrong way to go. Our results merely stress the necessity of significant social policy reforms in Germany.

4. Are East German Firms Ready for Enlargement?

Due to the geographic proximity of the accession countries, EU enlargement will have the strongest impact on Germany and Austria. The large wage differentials discussed in the previous section make it worthwhile for German firms to be prepared for the larger Europe. In particular, with the countries becoming members of the EU and thus taking over the acquis communautaire, it has become much easier and safer to carry out new investments in Eastern Europe or relocate existing production from Germany to the EU member states.

And indeed, the new Eastern EU members have become attractive locations for foreign investors. A survey conducted by the Ifo Institute among more than 1,000 German firms provides clear evidence. 44% of the polled firms have already committed themselves to an engagement in these countries; 19% carried out additional investments and 25% took advantage of the low labour costs and relocated plant sections to Eastern Europe (see Table 1). A considerable percentage of the firms is planning
further investment activities. Hence, the process of relocating business activities to the new EU member states will continue for some time in the future.\(^6\)

Table 1: Investment Activities of German Firms in Eastern Europe

<table>
<thead>
<tr>
<th>Additional investments in Eastern Europe…</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>…carried out</td>
<td>19%</td>
</tr>
<tr>
<td>…planned</td>
<td>23%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relocation of plant sections to Eastern Europe…</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>…carried out</td>
<td>25%</td>
</tr>
<tr>
<td>…planned</td>
<td>12%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>At least one of these measures taken…</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>44%</td>
</tr>
</tbody>
</table>


Are these figures also representative for East German firms? Unfortunately, the answer is no. East German firms are much more reluctant to adjust to the new economic environment. A survey conducted by Ifo Dresden in 2003 among 1,500 Saxon companies showed that as much as 49% of the firms considered EU enlargement as important (Gerstenberger et al. 2004). Among those firms, the majority (62%) was still undecided at the time of the survey whether to take any measures or not (see Figure 9). 16% of those firms even declared that no measures were necessary to prepare themselves for the new market conditions. Only 22% had decided on any measures at all. This assessment is in sharp contrast to the firms’ expectations from EU enlargement. Four out of five firms fear the risk of tougher price competition.

\(^6\) Similar results for investment activities were found by Stadtmann, Hermann and Weigand (2003).
The main reason for the different attitudes among East and West German firms is the size distribution of firms. In Germany as a whole, only 13% of the firms have less than 20 employees, while 26% employ 100 or more (Federal Statistical Office Germany 2003a). In contrast, most East German firms are small and medium sized and there are only very few large, internationally operating companies. Taking Saxony as representative for East Germany, 60% of the firms in mining and manufacturing have less than 20 employees, whereas only 9% employ 100 or more (Statistical Office of the Free State of Saxony 2003a). The bias in the size distribution can be seen as one factor for the East German firms’ concentration on the domestic market. Among the companies questioned in the Ifo survey, more than 90% transacted business within Germany, with special focus on the local market. The share of turnover realised in other countries barely reached 6% of total turnover. In the relatively close markets of Central and East Europe, Saxon companies realised only 1.1% of their total turnover in 2002. In total, East German firms in mining and manufacturing realised 25% of their turnover abroad, while it was 39% in West Germany (Federal Statistical Office Germany 2003a).

5. Demographic Change

A third challenge – again of special relevance to the New Laender – is the demographic development. While the total population in Germany will remain almost con-
stant for the next 15 years,\(^7\) Saxony will face a steep decline in its population (see Figure 10). In 2020, the Saxon population will have dropped to 85% of its 2000 level. Low fertility rates, an aging population and the ongoing East-West migration within Germany contribute to this decline. The development of the working age population is even more dramatic. Since the average age of the population is rising, the active population aged 15 to 65 will shrink by 25% from 2000 to 2020. This development is more or less the same in all of the New Laender.

**Figure 10: Demographic Development in Germany and Saxony**

(Index 2000 = 100)

![Graph](image)


Why should we care? A smaller population is not necessarily a bad thing – particularly in a densely populated area such as Germany. Moreover, the out-migration of workers may be an efficient reaction to better employment conditions in other German regions. For the New Laender, however, the development is threatening as it weakens their comparative advantage in knowledge-intensive production towards Eastern Europe. Given the inefficient rigidities in the German labour market (see Figure 4 and Section 3), demographic change will not eliminate unemployment among the low-skilled but may create a scarcity of the high-skilled – thus making the New Laender less attractive for firms’ location choices.

\(^7\) The population decline in Germany as a whole will start around 2013. The Federal Statistical Office expects a reduction of the German population from currently 82.5m to 75m in 2050 (Federal Statistical Office Germany 2003b).
Figure 11 reports the results from a recent Ifo study for Saxony (Thum et al. 2004). The employment gap measures the difference between the labour force (labour supply) and labour demand, according to the highest educational level achieved. The employment gap for the low-skilled (without vocational training) amounted to 105,114 in 2002\(^8\) and will decline only marginally; there will still be an excess supply of more than 60,000 workers in 2020. Hence, demographic change will not automatically eliminate unemployment as is often claimed by politicians. However, the situation is quite different for the high-skilled (university degree). The existing employment gap will shrink in the coming years making high-skilled workers a scarce resource in the Saxon labour market. Clearly, the employment gap will hardly become negative as Figure 11 suggests. The scarcity of high-skilled workers will force firms either to pay higher wages (to attract workers from outside or prevent them from leaving Saxony) or to relocate their business to regions with more abundant labour markets.

![Figure 11: Employment Gap in Saxony According to Educational Level](image)

Source: Thum et al. (2004, Figure 4.4).

6. Conclusion

EU enlargement offers significant welfare gains to old and new member states. However, these welfare gains do not come automatically but have to be earned by appropriate adjustments in domestic policies. This is particularly relevant for Germany’s

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\(^8\) This number translates into an unemployment rate of roughly 50%; see Figure 4.
New Laender, which could benefit from the proximity to the new EU member states in Central and Eastern Europe but which also suffer particularly from inefficient institutions in Germany.

It is mainly the labour market that prevents the realisation of gains from trade. Welfare gains will only be realised if wage adjustment is flexible. Instead, the German welfare system implicitly creates downward rigid wages. Without appropriate social policy reforms, the competitive pressure and the mobility of capital will destroy jobs in the New Laender. Instead of realising welfare gains, East Germany may simply experience rising unemployment – in particular of low- and medium-skilled workers. In that case, it is not EU enlargement that should be blamed but inefficient domestic institutions.

We also pointed out two further challenges for domestic policies in the wake of EU enlargement. First, the dominance of small and medium sized firms in the New Laender makes the necessary adjustments more difficult. And second, demographic change poses a challenge for the New Laender as it threatens their position in high-skilled production.

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