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**POTENTIAL MIGRATION AFTER THE FIRST ROUND
OF EU EASTERN ENLARGEMENT. IMPACTS ON
GERMANY'S LABOUR MARKET AND WELFARE
SYSTEM**



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SUMMARY

The first round of EU Eastern Enlargement occurred on May 1, 2004, with the accession of ten, mainly Central-Eastern European countries. This economic integration brings with it some potential East-West migration, to the greatest extent for Germany, but will bring benefits for some groups, while at the same time causing losses to others. This paper gives an account of some studies that estimate this migration potential and evaluate its impacts on the labour market and the welfare system in Germany. One major finding is that the numbers for migration potentials vary widely according to different models. The degree of effect depends largely on the types of labour that migrate – highly skilled or low-skilled – and which industries they find their jobs in.

GLOSSARY OF TERMS

3 CEECs	Czech Republic, Hungary and Poland.
4 CEECs	Czech Republic, Hungary, Poland, Estonia
4a CEECs	Czech Republic, Hungary, Slovakia, Romania
4b CEECs	Czech Republic, Hungary, Poland, Slovakia
5 CEECs	3 CEECs plus Estonia and Slovenia.
7 CEECs	Czech Republic, Hungary, Poland, Slovakia, Slovenia, Bulgaria, Romania
10 CEECs	The ten countries of the first Enlargement round: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.
10a CEECs	The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia, Bulgaria and Romania.
CEECs	All Central-Eastern European countries seen as potential accession countries in envisaged Enlargement rounds, plus Cyprus and Malta (not geographically in Central-Eastern Europe.
CGE model	Computational General Equilibrium model.
DIW	Deutsches Institut für Wirtschaftsforschung, Berlin.
EC	European Commission.
EC study	Fertig and Schmidt 2000.
EIC	European Integration Consortium.
EIC/DIW study	Boeri and Brücker 2000.
EU	European Union.
EU 15	Current EU member-states: Austria, Belgium, Denmark, Finland, France, Ireland, Italy, Greece, Germany, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.
EU study	Keuschnigg <i>et al.</i> 1999.
GDP	Gross Domestic Product.
HOS model	The Heckscher–Ohlin–Samuelson model.
IAB	Institut für Arbeitsmarkt- und Berufsforschung.
IFO	Institut für Wirtschaftsforschung, Munich.
IFO study	Sinn <i>et al.</i> 2000.
IfW	Institut für Weltwirtschaft, Kiel.
ILO	International Labour Organization.
IZA	Forschungsinstitut zur Zukunft der Arbeit, Bonn.
IZA study	Bauer and Zimmermann 1999.
OIM	Osteuropa-Institut, Munich.
PPP	Purchasing Power Parity

INTRODUCTION

The countries that acceded to the EU in the first round of Eastern Enlargement on May 1, 2004 (10 CEECs) were Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. They joined 15 current member-states (the EU 15): Austria, Belgium, Denmark, Finland, France, Ireland, Italy, Greece, Germany, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. The existing member-state widely thought to be affected most by this first round of Enlargement is Germany. It has the biggest trade with the 10 and it is the biggest net contributor to the EU budget. Certain direct payments may become a computable financial burden on Germany. Some trade benefits may lessen, while others have probably applied since the 1990s, when the opening of the CEECs to the West and gradual removals of trade barriers under the Europe Agreements had remarkable effects on trading activity.

Furthermore, the German labour market and welfare system will be the ones affected most by migration flows from the acceding countries to Germany. Will this post-Enlargement flow of labour benefit the German workforce, damage it, or do both, depending on the sorts of labour that migrate? Can distinctions be drawn between industries and between geographical areas in Germany, as to which will be more affected by migrating labour?

Understandably, the first round of Eastern Enlargement has become a controversial topic of public discussion in Germany. Public opinion is dominated by fears of a surge of immigration surge from Eastern Europe into Germany, competing with Germans for jobs and

stoking unemployment rates. Two-thirds of the Germans who expect high potential immigration perceive it negatively – in Eastern Germany, more than 80 per cent of them do. Similar proportions expect mounting unemployment and a rise in crime. Another 70 per cent fear that Enlargement will fuel the black labour market and 65 per cent fear the welfare system will be exploited. The concern about immigration has to be seen against the fact that 59 per cent feel there are too many foreigners in Germany already. The figures reflect special German concern about immigration and cross-border commuting: 55 per cent foresee the number of commuters to rising sharply, which is the main reason why 79 per cent fear that unemployment among German workers will rise.¹

Much work remains if the German population is to be convinced of the potential benefits of Enlargement, especially immigration. Yet think of the baneful demographic developments in Germany's ageing society today. These could make an annual flow of immigrants essential for maintaining current rates of economic growth? That is one fact being ignored amidst a hysterical wave of labour-market protectionism.

This paper scrutinizes the potential migration after the first round of Eastern Enlargement as computed with various models for Germany, and compares and evaluates these against the background just mentioned. *Section 1* draws implications from migration theories and theories of the economic effects of migration. *Section 2* compares various calculations on migration potential for Germany. *Section 3* views the incentives to migrate produced by the German labour market and welfare system and discusses the impacts of migration on these. *Section 4* argues that transitional periods with limited movements of labour would be a solution. *Section 5* sums up the

¹ Tuschhoff 2002, 25–9.

findings and draws conclusions for the future.

1) IMPLICATIONS OF THEORIES OF MIGRATION AND ITS ECONOMIC EFFECTS

The microeconomic models of migration theory assume that individuals want to maximize overall benefits in their lives, such as consumption of public and private goods in each period in a certain country, and some certain variables that can affect individual benefits: social, cultural and environmental aspects. By discounting future benefits, a present value for the period of decision-making is calculated. Individuals decide to migrate if the present value of benefits in the destination country, subtracted from the migration costs, exceeds the present value of benefits in the home country. Since individual evaluation of risks connected with the benefits is affected by uncertainty, information about life and working conditions in the home and the destination country, and the degree of individual risk aversion has high importance. Some models consider individual benefits as incomes, and migration costs as fixed costs, *i.e.* costs of moving assets and psychological costs. Thus individuals face an investment calculation for their individual human capital and will migrate if the present value of the income differential exceeds the fixed costs. Incomes are furthermore weighted with an individual probability of becoming unemployed, which is strongly influenced by unemployment rates. Individual expectations of these probabilities and the option of waiting are therefore of major importance where changes in some variables, such as wage level, are expected. Another factor that strongly affects decisions on whether to migrate or not is the heterogeneity of migrants in their

labour skills. Assuming just the two categories – highly skilled and low-skilled – there will be strong impact from individual information on wage differentials between these categories in the destination and home country, from individual perceptions of own skills and probability of potential employers recognizing such skills, or which level of skills they assume. With information asymmetries, the average wage level of immigrants gives a perspective. The development of average wage levels among immigrants depends on the relation between highly skilled and low-skilled labour. Thus the skill range of migrants affects their wage incomes after migration, which in return affects incentives to further migrants and determines future migration potentials.²

Theoretical models of migration discuss its impact on wages and employment in the destination country. The EIC/DIW study³ points out that in open economies, migration-induced additional supplies of labour in the destination country are not necessarily associated with a shift in relative wages. Relative wages stay unaffected if marginal labour demand is dominated by an industry producing tradable goods and facing elastic demand on world markets. If, for example, marginal demand for low-skilled labour in a country is dominated by textile industries that take world market prices as given, immigration by low-skilled labour increases production and exports of textiles, while wages remain stable. On the other hand, if marginal demand for low-skilled labour is dominated by an industry producing non-tradable goods, like services, which face fairly inelastic demand, an additional supply of low-skilled labour probably results in a decline in relative wages in that industry. But the authors add that empirical research on the impacts of migration has found very mod-

² Sinn *et al.* 2000, 24–30.

³ Boeri and Brücker 2000.

erate impacts on inter-regional and inter-industrial wage differentials.⁴

2) POTENTIAL MIGRATION TO GERMANY

The authors of the IFO study for the German Ministry of Labour⁵ point to three theoretic types of incentives for migration from the CEECs to the EU 15 that makes Germany a probable destination country for the majority of migrants. Incentives are seen as resulting mainly from income differentials between the home and the destination country and the expectations migrants have about the development of wage levels. As the wage differentials in the private sectors of some CEECs are much wider than in Germany, incentives to migrate to Germany result, especially for low-skilled labour. Another important source of migration incentives, especially among low-skilled workers, is the social redistribution of incomes in Germany and its effects. But the authors also mention another, less obvious incentive. The presence of networks built up by immigrants in the destination country reduces the psychological distance from the home country and can give initial information on the labour market, help build up a social network, and facilitate access to social services. These networks intensify migration incentives, especially in Germany, as the figures on allocation of CEEC migrants presented in this section indicate.⁶

2.1. Migration past and potential

To uncover the migration prospects from the CEECs to Germany calls for some demographic and economic figures on wage levels and unemployment rates in both. Then some studies of these will be considered.

In 1990–97, 585,000 migrants arrived in Germany from the 10 CEECs, where they make up some 0.7 per cent of Germany's population.⁷ The majority settled in the Eastern regions of Bavaria bordering the Czech Republic and Austria, where make up an average of 1.0–2.5 per cent of all employees, as opposed to an all-Germany average of some 0.5 per cent, with many regions below that.⁸ Furthermore, in 1998, 555,000 (65 per cent) of the 853,000 residents from the 10 CEECs in the EU were living in Germany, with Austria (12 per cent), Italy (4 per cent) and UK (4 per cent) far behind.⁹ This demographic background provides strong arguments for remarkable migration potential to Germany following Enlargement.

An IZA report¹⁰ also analyses Germany's structure of population to give further arguments for migration. In 1996, 8.90 per cent of all citizens in Germany were foreigners, which was way above the EU 15 average of 4.65 per cent. Germany's absolute number of 7.3 million foreigners amounted to 40 per cent of the EU 15 total 1996. Furthermore, the proportion of EU 15 foreigners in Germany remained quite stable, at 2.0 per cent in 1985, 1.9 in 1990, 2.2 in 1995 and 2.3 in 1998, while that of non-EU foreigners rose from 3.6 per cent in 1985, to 4.2 in

⁴ *Ibid.*, 24–5.

⁵ Sinn *et al.* 2000.

⁶ *Ibid.*, xvi–xvii.

⁷ Brücker *et al.* 2000.

⁸ Weise *et al.* 2001, 114.

⁹ Boeri and Brücker 2000, 46.

¹⁰ Fertig and Schmidt 2002.

1990, 6.4 in 1995 and 6.7 in 1998.¹¹ The demographic advantage to Germany of strong migration cannot be denied, but other studies that consider further aspects of migration reach different conclusions.

Another report IZA¹² looks at Germany's structure of immigration since 1950, to shed light on the possible structure of immigration from Eastern Enlargement. The authors conclude that immigrants to Germany have traditionally been mostly young male workers and they expect this pattern to remain. The report mentions that Germany experienced a decade of high birth rates in the late 1950s and early 1960s, whereas the 4 CEECs faced a similar baby boom directly after World War II. So the population structures of these CEECs and Germany differ considerably at the end of the 20th century. At the beginning of the 1990s, Germany had a relatively large 20–29 cohort, whereas the CEECs face bigger proportions below the age of 20. These people make up the future migration potential for Germany, the authors conclude. Furthermore, stable mortality rates and sharply declining birth rates in the CEECs in the 1990s will moderate future migration pressure, although the authors expect relatively high fertility rates in the CEECs in the future.¹³

For further evidence of comparable events during earlier historic Enlargements, let us look at the EU Southern Enlargement by Spain and Portugal in 1986. Like the Eastern Enlargement, it was followed by a seven-year period of restricted labour movement of labour, as explained later. During this transitional period, about 1000 Spanish and 6000 Portuguese workers a year received EU work permits, resulting in very modest migration flows. In fact, there was a net reduction in the number of Spanish

workers in Germany, as there was also migration from the EU to Spain and Portugal, of some 15,000 workers a year. Even in the early 1990s, after the transition periods, migration from Spain remained stable, while Portuguese migration further increased to an annual level of 30,000, of whom Germany absorbed 50 per cent.¹⁴

The IFO study foresees low and decreasing migration incentives for low-skilled workers from the 10 CEECs to Germany. The authors argue that most of the past migration to Germany took place at a time of high economic growth and low unemployment in Germany, resulting in high demand for low-skilled foreign workers. At the beginning of the 21st century, however, general economic conditions worsened, as demand for low-skilled immigrants decreased, unemployment correspondingly rose, and wage levels declined. The resulting immigration into unemployment causes high migration costs, as unemployed migrants do not receive public transfers in the destination country immediately after immigration. In addition, decreasing wages in the destination country lower the income gap for low-skilled workers and thus reduce migration incentives.¹⁵

So some arguments that predict significant migration potential to Germany from Eastern Enlargement coincide with others that foresee less remarkable migration. The following subsections present Germany's stakes in migration and the precise results of a model calculation on Germany's migration potential.

2.2. Germany's stakes in migration

Public and political opinion in Germany on the impacts of post-Eastern Enlargement immigration can be called hysterical

¹¹ *Ibid.*, 3–5.

¹² Fertig and Schmidt 2000.

¹³ *Ibid.*, 12–16.

¹⁴ European Commission 2001, 14–15.

¹⁵ Sinn *et al.* 2000, 40–45 and 76.

protectionism that ignores the need for immigration engendered by the demographic developments.

The IZA report covers population movements in Germany in the year of 1999. There were 9.3 births and 10.3 deaths per 1000, giving a natural decrease of 1 per 1000. The overall population growth of 1.5 – still below the EU 15 average – could only result from net migration of 2.5. The EU population showed natural growth of 0.7 and overall growth of 2.6 persons per 1000.¹⁶

The authors of a working paper for the Konrad-Adenauer-Stiftung¹⁷ use these demographic tendencies in Germany to underline positive effects of Enlargement for the German economy. They introduce the results of a study by the IAB, which also highlight huge demographic problems on the German labour market and in the social insurance system. Since Germany has an ageing society, the study argues, an annual decline in the labour supply of 200,000 persons results in a cut in the number of people employed by 14 million over the first half of the 21st century, which is one third of today's number. Remarkable problems for the pension system and the public health insurance system will be inevitable. Even net immigration of some 300,000 people a year would result in a ratio of employed to pensioners of 10:8 by 2050, which is half today's ratio. Also affected is the labour market. While the 4.0 million unemployed are decreasing only for demographic reasons, there are still some 1.45 million vacancies, which immigration of highly skilled labour could alleviate. Even among the medium-skilled labour that makes up one of Germany's strengths traditionally, some 6500–7000 electrical engineers a year are needed and 12 per cent of all jobs in the classic production sector are vacant. Against a background of 4 million unemployed, the authors still find a need

for low-skilled labour, as in Germany most of the seasonal work in vineyards and agriculture is done by immigrants. The authors conclude that there are notable German stakes in migration to follow EU Enlargement, which can foster innovation and flexibility by offsetting the ageing of the population.¹⁸

A study for the HypoVereinsbank¹⁹ also emphasizes Germany's demographic gap. The author argues with birth-deficit figures, concluding that Germany needs 450,000 net immigrants a year²⁰ to prevent long-term decline in the population. When the baby-boomers reach parenthood, the birth deficit will jump from 100,000 to 700,000 by 2050.

2.3. An econometric model on migration potential for Germany

This subsection presents the results of an econometric model of the migration potential for Germany from Eastern Enlargement, calculated for the EIC/DIW study. This model was chosen extensively because its assumptions seem closest to reality and its findings around the average of all calculations. The next subsection updates the results with a follow-up study that shows only slightly disparities. Some results of other studies are then compared.

The EIC/DIW study assumes that the human capital-investment theory mentioned in Section 2.1, with potential migrants calculating present values of expected and uncertain future costs and benefits from migration. Interestingly, this study explicitly considers how the propensity to migrate is allocated unevenly among people, resulting in country-specific shares of the population being willing to migrate, with income differentials. As soon as these people have mi-

¹⁶ Fertig and Schmidt 2002, 3–5.

¹⁷ Freudenstein and Tewes 2001.

¹⁸ *Ibid.*, 4–7.

¹⁹ Hueck 2003.

²⁰ The actual number in 2002 was 250,000.

grated, net migration declines to zero. That makes future immigration a function of income differentials (GDP per capita at PPP), employment prospects (highly dependent on unemployment rates), individual factors (a country-specific dummy-variable, indicating cultural aspects), the stock of past immigrants settled in the country, and institutional factors (the degree to which migration of labour is institutionally limited).²¹ The study makes an econometric analysis of migration potentials from the 10a CEECs, calculating a long-term equilibrium for stocks of immigrants to Germany, helped by historical data on migration to Germany from 18 countries: the EU 15, Norway, Switzerland, former Yugoslavia, Turkey and the United States in 1967–98. However, the authors mention several reasons why the results of past migration movements from the 18 countries considered in 1967–98 can only project to a limited extent 10a CEECs migration potentials to Germany in the 21st century. Most past migration happened in a time of economic growth and hardly any unemployment, while Germany's income differentials with the CEECs are much greater than with the 18 countries in this study. So the authors emphasize that the data input cannot give a precise forecast for Enlargement migration. For the calculation of migration potential from the 10a CEECs, the study conducts three scenarios of the development of income differentials. The results are average numbers that can vary widely with business cycles. This subsection presents the baseline scenario and the next the higher and the lower ones.²²

In the baseline scenario, GDP per capita in Germany grows by an annual average of 2 per cent and in the 10a

CEECs²³ by 4 per cent. This cuts income differentials by 50 per cent over the next 35 years, with unemployment rates stable at the 1988 rate for Germany and the 1998 rate for the 10a CEECs. The outcome is an annual increase in the number of residents from the 10a CEECs in Germany of about 218,000 in 2002, declining to about 162,000 in 2005, 95,600 in 2010, 27,500 in 2020 and 1,500 in 2030. There will be an aggregate increase of around 2,000,000 residents from the 10a CEECs in Germany over the 2002–30 period, of which 1,355,000 are expected to migrate before 2010. Added the stock of past immigrants, there will be altogether 2,500,000 residents from the 10a CEECs in Germany by 2030, making up 3.5 per cent of Germany's population. Extrapolating these results onto the EU 15 shows about 3,000,000 migrants expected by 2030, with Germany taking two-thirds of the migration potential. The authors conclude that migration to Germany will increase as a result of Eastern Enlargement, but it will be distributed over a long period and decrease until almost zero by 2030, when the long-term equilibrium for the migration stock is reached.²⁴

Still, there are three aspects of events in the recent past that may change the projected results considerably. (1) Unlimited movement of labour, assumed in the EIC/DIW study, is not realistic, as the EU Council, at its meeting in Copenhagen in 2002, proposed a period of limitation of the free movement of up to seven years,²⁵ after strong pressure from Germany. (2) The first Eastern Enlargement actually took place on May 1, 2004, not in 2002 as the study assumes. These two changes may have a notable impact on the calculation or simply postpone the migration poten-

²¹ Brücker 2000. The study assumes unlimited movement of labour from 2002 onwards in all its three scenarios. See Section 5 for further discussion.

²² Brücker 2000; Table 1.

²³ This gives a convergence rate of 2 per cent a year for income differentials.

²⁴ *Ibid.*; Table 1.

²⁵ The same applied with Southern Enlargement in 1986.

tials – more on that in Section 4. Finally, Malta and Cyprus, not Romania and Bulgaria, have joined the first round, which reduces the migration potentials to Germany, as Romania, after Poland, takes the biggest share of potential migrants in this calculation: 605,000 (30 per cent).²⁶

2.4. More extreme scenarios – an approach using sensitivity analysis

The factors that shift in this attempt at sensitivity analysis are the underlying unemployment rates and the rate of income-differential convergence. Assuming stable unemployment rates in Germany (at the rate of 1988) and the 10a CEECs (at the rate of 1998) and a convergence rate for the income differentials of 2 per cent a year, a low-projection scenario presumes unemployment rates of 10 per cent for Germany and 5 per cent for the 10a CEECs and a convergence rate of 3 per cent a year. The results show far fewer immigrants to Germany: an annual 175,000 in 2002, declining to 12,000 in 2020 and even a following migration of 7,000 a year up to 2030, giving an aggregate of only 1,375,000 immigrants to Germany, compared with 2,000,000 according to the baseline scenario.

The high-projection scenario, assuming unemployment rates of 5 per cent for Germany and 15 per cent for the 10a CEECs and a convergence rate of 1 per cent *p.a.* for the income differentials, produces results of far more migrants.²⁷ Starting with some 241,000 a year in 2002 and declining to 69,000 in 2010 and 11,600 in 2030, the aggregate of 2,500,000 substantially exceeds the

2,000,000 from the baseline scenario and the 1,375,000 from the low-projection scenario.²⁸

An update of the EIC/DIW study conducted in 2003²⁹ widely confirmed its results. The net increase in the number of foreign residents from the 10a CEECs³⁰ in Germany – which roughly equals the net migration flow – was estimated at 180,000 after the introduction of free movement of labour and was expected to peak at about 225,000 immigrants a year later. The overall long-term migration potential is calculated at 2,300,000 immigrants, reached about 25 years after the introduction of free movement. These are the results of the baseline scenario. The update study retains the basic three-scenario structure of the EIC/DIW study, but with the underlying unemployment rates adjusted to the average for 1990–2001. In the high-migration scenario, the initial net increase in the foreign population in Germany is expected to be between 215,000 and 230,000, with a long-term potential of 2,800,000 immigrants. In the low-migration scenario, initial net migration is estimated at 150,000 and the long-term aggregate at 1,970,000. Over 70 per cent of these migration flows are expected to come from the 8 CEECs³¹ of the first Enlargement round and less than 30 per cent from Bulgaria and Romania. That would lead to an overall migration potential, from the 8 CEECs³² actually joining on May 1, 2004, of 1,610,000 immigrants in the baseline, 1,960,000 in the high and 1,380,000 in the low-projection scenario.³³

²⁶ Brücker 2000; Boeri and Brücker 2000, 121–4; Table 1.

²⁷ If incomes in the CEECs converge on EU incomes by only 1 per cent instead of 3 per cent, more people migrate.

²⁸ Brücker 2000; Boeri and Brücker 2000, 121–4; Table 1.

²⁹ Alvarez-Plata *et al.* 2003.

³⁰ This update is still based on an Enlargement by 10a CEECs (including Bulgaria and Romania).

³¹ The 10 CEECs except Cyprus and Malta.

³² Migration from Malta and Cyprus is considered negligible.

³³ *Ibid.*, 38–9.

2.5. A comparison of different models giving different results

This subsection presents further calculations of migration potentials for Germany from the first round of Eastern Enlargement, using three other models. These project different migrant totals from a background of different assumptions.

An IZA study conducted in 1999 for the British Department for Education and Employment³⁴ in 1999 comes to very similar results to the EIC/DIW study. The authors derive their estimates of gross post-Enlargement migration to the EU 15 from 7 CEECs from four different data channels: (1) data on East-West migration after the opening of the CEECs in the 1990s, (2) own surveys conducted in the CEECs, (3) a qualitative evaluation based on economic and demographic conditions in Eastern and Western Europe, and (4) an econometric simulation model based on data from the 1986 EU Southern Enlargement. Their results say that there will be some 200,000 migrants annually making up 0.05 per cent of the EU 15 population. Within a period of 15 years, 2–3 per cent of the total population of the CEECs³⁵ are likely to migrate to the EU 15, *i.e.* 2,000,000–3,000,000 people. Two-thirds – 1,300,000–2,000,000 – will settle in Germany because of existing networks of immigrants, which the authors evaluate as negligible, since there were about 800,000³⁶ immigrants settling in Germany in 1980–90. The authors mention that there will additionally be a large number of migrants returning to their home country, resulting in lower numbers for net migration to Germany.³⁷

³⁴ Bauer and Zimmermann 1999.

³⁵ About 100 million people.

³⁶ Equivalent to 1 per cent of Germany's population.

³⁷ Bauer and Zimmermann 1999, 31–45.

A study published by the European Commission (EC)³⁸ in 2000 calculates a migration potential based on demographic, rather than economic factors. The authors prefer to fix economic variables and individual migration tendencies at the time of calculation and emphasize the relevance of stocks of immigrants in a destination country building up networks. The study considers demographic developments in the CEECs compared to Germany after World War II, highlighting different timings for baby booms, resulting in different population structures today, and turning the CEECs into ageing societies with a reduced willingness to migrate. Using this data, rates of net migration in the 4 CEECs for the whole population and the core below-40 age group that is willing to migrate first are calculated, using three main scenarios. The first rests on the post-World War II emigration rate of 3 per cent for the 4 CEECs, resulting in a negligible 14,000–18,000 migrants from the 4 CEECs reaching Germany each year and for the 1998–2017 period a total of 293,000–360,000. The second scenario considers future demographic developments in the CEECs and calculates some 15,000–57,000 migrants a year and 302,000–1,147,000 by 2017. The third scenario is based on a 4 per cent emigration rate for the core age group, leading 48,000–63,000 immigrants a year to enter Germany, with an aggregate of 970,000–1,250,000 for 1998–2017. If we project the results of the 10 CEECs calculations in the EIC/DIW and IZA studies onto the 4 CEECs calculation in the EC study, its results give about the same numbers. The upper limit of 1,250,000 calculated by the EC study exactly fits the 1,250,000 of a EIC/DIW 4 CEECs variant and just exceeds the 800,000–1,200,000 for a 4 CEECs-adjusted IZA study.³⁹

³⁸ Fertig and Schmidt 2000, 12–26; published as an 'Information Note' on 06/03/2003.

³⁹ *Ibid.*, 12–26.

However, the results of the IFO study⁴⁰ finally presented here exceed greatly the results of the other studies.⁴¹ The econometric simulation here is based on a CGE model. The study considers EU accession of 5 CEECs in 2002, with unlimited movement of labour, based on migration data from Turkey and migration results from the 1986 EU Southern Enlargement. The calculations of migration potentials based on income differentials at PPP are grouped in scenarios: a relative income growth of 2 per cent in the CEECs, or stable income development. Subtracting the figures for Romania from the model outcomes for 2002–17, the study still suggests 2,100,000–2,700,000 immigrants for Germany from the 4b CEECs, those with the biggest shares of the 10 CEECs' population. Although, the authors say it is hardly possible to calculate these results in a time series, one can conclude that there will be 120,000–150,000 immigrants a year in the early years, which projects onto the 10a CEECs⁴² as 250,000–300,000. However, irrespective of the development of the income differentials, the study suggests an annual 200,000–250,000 immigrants into Germany in the first years, which will be even higher if the migration is concentrated in those years.⁴³ In an update, the authors try to adjust the results to the 8 CEECs and they calculate a longer-term migration potential of 2,500,000–3,300,000 for Germany.⁴⁴ These numbers exceed even the 1,960,000 of the high-projection scenario of the EIC/DIW update made for the 8 CEECs. To make a further reasonable comparison possible, let us adjust the results to the 4b CEECs of the other studies. The 2.1–2.7 million immigrants up to 2017, forecast in the IFO study, greatly exceed the 1.25 million calculated

in the EIC/DIW study and the EC study, and leave far behind the IZA study, with its 0.8–1.2 million immigrants for Germany. The IFO study explains this huge gap in the results by a methodological difference in compiling and interpreting the data used by the IFO and the DIW, since the data itself turns out to be similar. The difference is said to lie in the stress put on either the cross-country data or the time-series data: the long-term migration potential depends either on the cross-country income differentials or the income differentials among business cycles.⁴⁵ Further evaluation of this gap is left an open question.

The conclusion must be that a first-round migration flow of 2,000,000–3,300,000 from the 8 CEECs seems the absolute maximum to be expected in Germany. But it leaves open the question how the three aspects of recent events mentioned in Subsection 3.3, especially the limitation of free movement of labour, could change the actual impacts. More on that follows later, but first, let us continue with the impacts of the migration on Germany's economy.

3) EFFECTS OF MIGRATION POTENTIALS IN GERMANY

This section discusses impacts of the calculated migration potentials on the German labour market and the welfare system. A major result will be that the degree of effect depends greatly on the skill types of labour that migrate and the destination industries.

⁴⁰ Sinn *et al.* 2000.

⁴¹ See also Table 1.

⁴² This includes Romania and Bulgaria, not Malta and Cyprus.

⁴³ *Ibid.*; Table 1.

⁴⁴ Sinn and Werding 2001, 42; Table 1.

⁴⁵ *Ibid.*, 43; Table 1.

3.1. The German labour market

This subsection on the impacts on the German labour market begins with an introduction to the labour markets in the CEECs and the EU, showing employment structures and wage levels.

3.1.1. Employment and wage-structure comparisons

The IFO study analyses the employment structures in Germany and the 5 CEECs. The structures in these countries changed a lot in the 1990s, as employment in the service sectors rose sharply while jobs in the processing industries, agriculture and fisheries fell by more than twice that amount, so forcing the transformation process into the tertiary sectors. However, employment in agriculture increased in Poland and Romania in the 1990s, to shares of 25 and 37 per cent of employment respectively in 1998. The share of agriculture was much smaller in Slovakia (7.8 per cent), Hungary (7.5 per cent) and the Czech Republic (5.4 per cent), although all three remained above the EU 15 average of 4.8 per cent. The sharpest decline in the processing industries was faced by Romania in the 1990s (-39 per cent), leaving a remaining share of 33 per cent – less than the 41 per cent in the Czech Republic and just slightly above the EU 15 average of 30 per cent. The service sector continues to grow in the CEECs. It already accounts for high shares of employment in the Czech Republic (54 per cent), Slovakia (51 per cent), Poland (45 per cent), Romania (33 per cent), and Hungary (the biggest of all at 58 per cent, but still well below the EU 15 average of 66 per cent.⁴⁶

As far as employee qualifications are concerned, the IFO study points out that in Germany as well as the 5 CEECs, employment of highly skilled workers increased in the 1980s and 1990s, while employment of low-skilled workers decreased. Average educational and skill levels in the 5 CEECs is much higher than in Greece, Spain or Portugal, except in the case of Romania. The educational structure in the Czech Republic is very similar to Germany's, although the proportion of the population in Germany with tertiary educational attainment is generally bigger than in the CEECs. All in all, the structure of qualifications and the unemployment in the 5 CEECs is biased towards low-skilled jobs, relative to Germany, but a closer look at the structure of unemployment shows that unemployment in Germany is concentrated on low-skilled workers. In 1999, 24 per cent of low-skilled workers were unemployed, as opposed to 9.5 per cent of all workers. In some Eastern regions with the highest unemployment rates in Germany, 55 per cent of the low-skilled workers were unemployed in 1997. Foreigners in Germany are mainly low-skilled workers, although the proportion of these among those from the 5 CEECs is lower than for other nationals in Germany, such as Turks and former Yugoslavs. For 77 per cent of all unemployed foreigners in Germany in 1997 had no qualifications at all.⁴⁷

Looking at the unemployment rates, it becomes obvious that there is still a huge gap for some CEECs, although others have kept up with Germany. In 2002, the rates were 3.2 per cent in Cyprus, 7.3 per cent in the Czech Republic, 10.3 per cent in Estonia, 5.8 per cent in Hungary, 12.0 per cent in Latvia, 14.0 per cent in Lithuania, 5.2 per cent in Malta, 19.7 per cent in Poland, 18.5 per cent in Slovakia, 6.4 per cent in Slovenia, 17.8 per cent in Bulgaria, 8.4 per cent in Romania, and 10.3 per cent

⁴⁶ Sinn *et al.* 2000, 51–73.

⁴⁷ *Ibid.*

in Turkey.⁴⁸ In Germany, the comparable overall unemployment rate in 2002 was 8.7 per cent,⁴⁹ so that employment conditions look better in Germany only for some people from the CEECs; for many they look worse than at home.

The situation looks quite similar with wage levels. In 1995, the average wage level in the 10a CEECs was at 8.9 per cent of the EU 15 average and 7.6 per cent of Germany's wage level.⁵⁰ But there is strong variation between the 10a CEECs. Bulgaria's wage levels were 3.3 per cent of Germany's in 1995, Latvia's 4.9 per cent, Slovakia's 7.0 per cent, Hungary they were at 9.0 per cent and at 27.7 per cent in Slovenia. The large differences in nominal wages in the CEECs and EU do not only reflect differences in labour productivity. They are also a function of varying exchange rates. Average real wages in the 10a CEECs are about 20 per cent of the respective levels in the EU, according to PPP estimates by the World Bank.⁵¹

The different structures of the labour market in the CEECs and in Germany indicate that there is a huge potential for convergence resulting from labour migration following an EU Eastern Enlargement. The next subsection considers whether the migration potentials calculated above can have an impact on Germany's labour market that brings converging developments.

3.1.2. The impacts of migration on Germany's labour market

Immigration of foreign labour does not necessarily have a detrimental effect on domestic workers. Economic theories suggest that in open economies, the effects of migration on wages and em-

ployment can be neutral, but they can also affect inter-industrial wage differentials and displacement risks. The wage and employment effects of migration may not be spread equally over the workforce. Employees with substitutive human-capital endowments in relation to immigrants may lose by immigration, while those with complementary human-capital endowments may benefit. And the results depend much on the skill structure of the immigrants. This subsection presents the results of several studies on the impacts of immigration on the German labour market. The consensus opinion turns out to be that the results depend on the qualifications of the immigrants and the flexibility of the German labour market, and that they may well be less threatening than they are often predicted to be in public discussion.

According to the IFO study,⁵² the inflexibility of the German labour market will mean that an additional supply of labour, at least in the short term, will increase unemployment rates rather than decrease wage levels. The study arrives at six further findings. (1) The qualification structure of the immigrants from the CEECs will continue to be biased towards highly skilled workers, by comparison with other immigrant nationalities. (2) Increasing immigration from the CEECs will put pressure on wages in some parts of the German labour market, especially in low-skilled jobs in processing industries. Impacts on the general wage level may be positive, but a wider wage structure may have negative impacts on income allocation in Germany. Pressure on wage levels is expected to appear in industries where domestic workers are substitutive, rather than complementary to immigrant workers. The authors expect such crowding-out effects for low-skilled workers in Germany's manufacturing and construction industries. For low-skilled workers in services, the authors foresee minor

⁴⁸ European Commission 2003, 25–183.

⁴⁹ laborsta.ilo.org. Calculated on the standard of the International Labour Organization for all aged 15 and older.

⁵⁰ Table 3.

⁵¹ Boeri and Brücker 2000, 13–14; Table 3.

⁵² Sinn *et al.* 2000.

crowding-out effects, since relations between domestic and immigrant workers there are complementary. The study points in general to the impacts on wage levels and employment being strongly dependent on the skill levels of the immigrants. Incomes of low-skilled workers decrease and incomes of highly skilled workers slightly increase if the immigrants are mainly low-skilled workers, whereas incomes of highly skilled workers slightly decrease and incomes of low-skilled workers increase if the immigrants are mainly highly skilled workers. In the past, relatively highly skilled immigrants from the CEECs were mainly employed in relatively low-skilled jobs. But if they can manage in the future to be employed in highly skilled jobs, according to their level of skills, they may thereby reduce the peak levels of wages in such highly skilled jobs as IT. (3) Immigration from the CEECs will intensify expansion of the service sector in Germany, since more and more immigrants are employed in the service sector and immigration increases growth and employment rates in the long term, by increasing allocation efficiency and consumption. 4) In the long term, employment for immigrants will become adjusted to their skill levels, whereas in the short term, highly skilled and low-skilled immigrants will compete for the same jobs. 5) Immigration of commuters implies long-term chances, but also risks for the labour markets of the regions directly bordering the CEECs. 6) With its commuters, the CEECs can function as a reserve and a buffer for the German labour market, which in the long term will be burdened by an ageing society and therefore happy to welcome young workers from the CEECs.⁵³

A study from the OIM⁵⁴ also emphasizes the relevant relation between domestic and immigrant workers, with immigration of substituting workers de-

creasing domestic wage levels and immigration of complementary workers tending to increase them. It also highlights the importance of the skill levels of immigrants and reaches the same conclusions as the IFO study on domestic wage levels. The authors mention a study on Germany that shows the results of a 1 per cent increase of employment by general immigrants making domestic wages of all workers decline by 0.35 per cent, with a 0.45 per cent decline for low-skilled wages and a 0.12 per cent increase for highly skilled wages. They mention another study that models a 1 per cent increase in domestic labour by low-skilled immigrants, with stable unemployment rates resulting in a 3.1 per cent decline of the low-skilled wages and a 0.5 per cent increase of highly skilled wages. However, if the immigrants are mainly highly skilled workers, wages of low-skilled workers rise by 0.8 per cent, whereas wages of highly skilled workers fall by 0.5 per cent. As far as unemployment is concerned, the authors emphasize that studies have not found any strong impacts of immigration on unemployment in the destination country, apart from a slight tendency to increase unemployment among low-skilled workers.⁵⁵

Another OIM study⁵⁶ also emphasizes that the impacts on the German labour market will be moderate and mainly low-skilled workers will be affected. The study recalls the economic theories stating that in open economies, immigration of labour does not affect domestic income allocation, so long as marginal export demand is dominated by an industry with tradable output and elastic demand on world markets. In this case, immigrating labour serves additional demand on world markets and domestic incomes remain unaffected. The industries with non-tradable output, though, face decreasing wages and in-

⁵³ *Ibid.*, 108–19.

⁵⁴ Dietz *et al.* 2000.

⁵⁵ *Ibid.*, 45–6.

⁵⁶ Quaisser 2001.

creasing unemployment. The study mentions results of econometric estimations of the impacts of a 1 per cent increase in the share of foreigners in Germany. Wages would decline by 0.6 per cent and the probability of unemployment would rise by 1.8 per cent. Low-skilled workers, especially in regions directly bordering the CEECs, will face sharper income cuts than highly skilled ones.⁵⁷

The EIC/DIW study also mentions the substituting and complementary aspects of highly skilled and low-skilled workers and the relevance of the skill structure of immigrants. The authors build up two scenarios. In the first scenario, it is presumed that the immigrants are all low-skilled workers. If wages are flexible, they decrease so much that 1 per cent (of the population) immigration keeps the incomes and unemployment rate of low-skilled workers stable. Whereas, if wages are rigid – domestic workers are substitutive by immigrants – incomes of domestic workers decrease by 0.65 per cent. Furthermore, immigration can have a huge impact on income allocation. If immigration of low-skilled workers makes wages decline so that unemployment rates remain constant, incomes of low-skilled workers decrease by 3.1 per cent and incomes of highly skilled workers increase by 0.5 per cent. In the second scenario, all immigrants are highly skilled workers. The complementary relation between highly skilled and low-skilled workers in this case makes demand for low-skilled workers increase. The development of wage levels still depends on the degree of rigidity. So immigration of highly skilled workers can increase the incomes of low-skilled workers, but with allocation effects present. If wages are flexible, incomes of low-skilled workers will increase by 0.8 per cent, whereas those of highly skilled workers will decrease by 0.5 per cent, leaving unemployment rates stable. However, if wages are rigid, unemployment

of low-skilled workers is sharply reduced and incomes of domestic workers increase by 1.38 per cent, in the case of 1 per cent immigration. The DIW calculated in another study⁵⁸ that an increase of 1 per cent in the share of foreigners in Germany makes wages of domestic workers decrease by 0.62 per cent in a period of five years. In that case, low-skilled workers face sharper losses than highly skilled ones. The EIC/DIW study refers to these results and breaks down the 0.6 per cent reduction in wages into skill segments. This shows wages of low-skilled workers declining by 1.6 per cent and those of highly skilled workers declining by just 0.1 per cent.⁵⁹

However, the author of the other study from the DIW⁶⁰ mentions that the impacts on unemployment are less strong than those on wages. Taking the results of a study that shows a 0.24 per cent increase of regional unemployment rates in Germany in the period of 1988-1993 resulting from immigration, the author concludes that with the relatively moderate immigration potential from the Eastern Enlargement of the EU, the effects on unemployment will be even smaller. The study calculates that a 1 per cent increase in the share of foreigners in Germany for the period of 1990-1995 makes the probability to become unemployed for domestic workers increase by 0.18 per cent, *i.e.*, 7,500 additional unemployed, with a remarkable bias towards low-skilled workers.

The IZA study refers to the EIC/DIW study and concludes that the impacts of immigration in Germany following an EU Eastern Enlargement by 10 CEECs on the German labour market in general will be modest. They further mention that immigration of highly skilled workers will even result in growth effects in Germany and the impacts of low-skilled workers immigrating in Ger-

⁵⁷ *Ibid.*, 48.

⁵⁸ Bauer 2000.

⁵⁹ Boeri and Brücker 2000, 84–91.

⁶⁰ Bauer 2000.

many will be bearable, but the exact structure of the potential immigrants concerning their skills cannot be foreseen.⁶¹

Another study from the IFO⁶² concludes that skill-unbiased immigration can reduce unemployment by output expansion effects for both, highly skilled and low-skilled workers.⁶³ But, since the authors expect immigration to be concentrated in the low-skilled segment, only highly skilled workers experience a lower unemployment rate, while unemployment among low-skilled workers increases. The study calculates empirical results of impacts on unemployment and wage levels in three steps. Initially, only the effects of low-skilled workers among the immigrants are calculated. Simply by their immigration, the unemployment rate of domestic low-skilled workers increases by 0.544 per cent, while that of highly skilled workers decreases by 0.088 per cent, resulting in an average increase of 0.058 per cent. Wages of low-skilled workers decline sharply by 4.251 per cent, while those of highly skilled workers increase by 1.174 per cent. However, the second part of the effects, considering the highly skilled workers among the immigrants, shows reduced unemployment by 0.121 per cent for low-skilled and 0.023 per cent for highly skilled workers, resulting in an average 0.043 per cent reduction. Wages are up 0.921 per cent for low-skilled and 0.171 per cent for highly skilled workers. Putting these partial impacts together in the third step, total immigration results in a 0.009 per cent increase in average unemployment, a 0.402 per cent increase for low-skilled and 0.110 per cent decline for highly skilled labour. Wages are down 3.389 per cent for low-skilled and up 1.353 per cent for highly skilled workers.⁶⁴

⁶¹ Bauer and Zimmermann 1999, 65–74.

⁶² Hejdra *et al.* 2002.

⁶³ See also Table 4.

⁶⁴ *Ibid.*, 25–6; Table 4.

These results underline my conclusion that the impacts of immigration are differently allocated among highly skilled and low-skilled workers. Since the precise structure of potential migration from Eastern Enlargement to Germany cannot be known in advance, the exact allocation of benefits and losses among domestic workers is not clear. But it should be emphasized that the overall impacts on the German labour market are commonly regarded as moderate. The next section analyses whether the same holds true for the welfare system.

3.2. Germany's welfare system

This section seeks to identify incentives for potential migrants to move to Germany that result from differences in welfare systems. It discusses the effects of this post-Enlargement migration on Germany's welfare system.

3.2.1. Incentives to migrate

The IFO study⁶⁵ points out differences in the welfare systems of Germany and of the CEECs, using data from the ILO on state aid payments to certain social groups. Welfare expenditures turnout to be much higher in the former. In 1996, Germany spent 29.7 per cent of its GDP on welfare, whereas the 4a CEECs' share was 16.7 per cent, with 20.9 per cent in Slovakia and Hungary and 12.5 per cent in the Czech Republic and Romania. At the same time, welfare expenses in Portugal amounted to 11.0 per cent of GDP and in Turkey 5.2 per cent.⁶⁶ In 1997, Germany's unemployment payments for a single person reached 60 per cent of a worker's income and its social-security payments 54 per cent, which is similar in Hungary's (61 and 44 per cent), but

⁶⁵ Sinn *et al.* 2000.

⁶⁶ *Ibid.*, 83–4.

those in the Czech Republic (51 and 34 per cent) and Poland (38 and 36 per cent) are much less. The payments for a family with two children in 1997, though, exceeded Germany's (73 per cent unemployment payments and 52 per cent social-security payments) in the Czech Republic (83 and 81 per cent), while Hungary (69 and 56 per cent) and Poland were behind (43 and 39 per cent). Finally, it is interesting to compare the social-security payments for a family with two children in Germany with the net income of a family in the CEECs in absolute terms and PPP. In 1997, a family in Germany received USD 11,700 a year in social-security payments, whereas the net income of a similar family in the Czech Republic amounted to USD 10,600. In Poland (USD 7200) and Hungary (USD 5900) it was much less.⁶⁷

Another study⁶⁸ measures intergenerational redistribution by comparing public pension spending relative to GDP. While in 2000, Germany spent 11.8 per cent, Poland 10.8 per cent, the Czech Republic 7.8 per cent and Hungary 6.0 per cent, in a projection to the year 2050, Germany will face spending some 16.9 per cent of GDP on public pensions, the Czech Republic 14.6 per cent, Poland 8.3 per cent and Hungary 7.2 per cent. The study argues on this projection that it is not favourable for a young worker to be a member of a pension system that shows a development like the German one, where substantial future reforms can be expected for demographic reasons. By calculating internal rates of return on the pension systems,⁶⁹ the authors conclude that average returns on contributions to the pension system are higher in the CEECs than in Germany, making it less attractive to be a future contributor to the German pension system.⁷⁰ However, it is

hard to say whether potential migrants make such calculations, or whether they are swayed more by obvious differences in welfare payments pointed out earlier.

3.2.2. Impacts of migration on Germany's welfare system

This subsection discusses if the additional migrants expected in Germany after Eastern Enlargement will negatively affect Germany's welfare system by drawing more than they contribute and thereby generating additional artificial migration incentives.

The Krieger and Sauer study considers solely the impacts on Germany's pension system, which they are expected to be almost negligible, but positive. The potential immigrants to Germany are expected to be relatively young, so that they will contribute more to the German pension system than they benefit from it in the long term, if the migration potential turns out to be the estimated 130,000–300,000 a year in the first 15 years.⁷¹ It also projects that Germany's public pension spending in relation to GDP will increase from 11.8 per cent in 2000 to 16.9 per cent in 2050, calculated on a baseline of 300,000 net immigrants a year declining to 20,000 over that period. A 50 per cent increase in the number of immigrants lowers the pension spending relation by only 1 per cent. So even massive immigration after Eastern Enlargement will only have slight effects on the German pension system.⁷²

However, the IFO study analyses the impacts on the welfare system through each of the social-security funds. Immigrants contribute on average 5 per cent less to the public health insurance system than Germans do. To the public nursing care insurance system, however, foreigners in 1997 contributed EUR 1 billion more than they received.⁷³ And

⁶⁷ *Ibid.*, 90–96.

⁶⁸ Krieger and Sauer 2003, 24–5.

⁶⁹ The growth rate of average wages added to population growth.

⁷⁰ *Ibid.*

⁷¹ *Ibid.*, 17–18.

⁷² *Ibid.*, 25.

⁷³ Converted at a rate of DEM 2 = EUR 1.

even when taking into account that they built up claims on future benefits from the funds, the study comes to the result that foreigners are net contributors to the public nursing care insurance system, contributing to it to a larger extent than Germans do. To the public pension system, foreigners⁷⁴ are generally net contributors based on current payments, whereas Germans are not. With public unemployment insurance, immigrants receive more benefits than they contribute; those staying fewer than 24 years in Germany are net contributors, but those staying longer than 25 years are net beneficiaries. The situation looks different with the social-security funds. Just 1.3 per cent of all Germans receive such payments, while 3.1 per cent of all foreigners do, with a bias towards those in the 10–25 age group. Finally, the study strikes a balance for all public funds and concludes that foreigners, in 1997, were net recipients from the German welfare system. This so called migration premium amounted to EUR 700 per capita, with EUR 2300 for those who had lived there for less than 10 years, but a net contribution of EUR 850⁷⁵ per capita for those resident for more than 25 years. The authors argue that immigrant workers have low average skills, or at least they are in the short term employed in low-skilled jobs below their skill-level, so that their wage incomes and consequent welfare contributions are low compared with the social benefits they receive.⁷⁶

The authors of another IFO report⁷⁷ argue, from the finding that immigrants in Germany are net recipients of the welfare system, for artificial migration incentives, especially among low-skilled workers, and thereby in the short term, for an enlarged migration potential for Germany. The resulting fiscal burden,

they argue, will encourage the destination country to reduce welfare benefits, so that erosive forces of competition among EU welfare systems may evolve.

4) TRANSITIONAL PERIODS OF LIMITED LABOUR MOVEMENT

Against the results shown in the preceding section, the EU Council decided at a meeting in 2002 that free movement of labour would be limited for a two-year period after Enlargement, with the possibility for member-states to extend this to seven years. Germany was expected to avail itself of the whole seven-year period, when a restricted number of work permits for migrant workers from the CEECs would be issued. This section considers the economic impacts of such curbs.

The EIC/DIW, IFO and IZA studies agree that it is not useful to curb movement completely. Assuming a policy of zero net migration from the 8 CEECs in the transitional period, the EIC/DIW study calculates that postponing free movement from 2004 to 2006, 2009 or even 2011 would neither reduce net migration flows in the initial years after liberalization nor affect the long-term stock of foreigners. In the most radical scenario – a seven-year period for the first two rounds⁷⁸ – the net annual increase in immigrants peaks at 210,000 in 2015. This is 15,000 less than if free movement had been introduced for all 10a CEECs at the same time in 2004. Restrictive use of the transitional period fails to mitigate potential pressures from migration on labour markets and welfare systems.⁷⁹ All three studies agree on the need to limit free movement of labour

⁷⁴ If they do not stay longer than 25 years.

⁷⁵ Converted at a rate DEM 2 = EUR 1.

⁷⁶ Sinn *et al.* 2000, 190.

⁷⁷ Sinn and Werding 2001, 44–5; Sinn 2002, 107–9.

⁷⁸ Zero migration from the 8 CEECs until 2011, then from Bulgaria and Romania until 2014.

⁷⁹ Alvarez-Plata *et al.* 2003, 41–2 and 46.

with quotas for a transitional period, as was done for the Southern Enlargement of 1986.

The IFO study⁸⁰ points out that limiting free movement with work-permit quotas can prevent artificial immigration lured by prospects of net welfare benefits. Quotas are beneficial, as they also prevent crowding-out of domestic workers if wages are inflexible and above market level. This effect is probable, as Western European wages are rather rigid. If they were flexible, immigrant labour would simply depress wages, but leave domestic unemployment unaffected.⁸¹

Implementing a transitional period of limited labour movement makes potential migration to Germany more precisely predictable and allows labour markets and the welfare system to adjust gradually to the migration flows.⁸²

5) CONCLUSIONS AND POLITICAL IMPLICATIONS

As the first round of Eastern Enlargement was implemented on May 1, 2004, public opinion in Germany was concerned mainly about migration surges, rising unemployment, decreasing wages, and more welfare claimants. It has been pointed out there is some potential East-West migration to be expected in the coming years, with differentiated impacts on the German economy.

People are expected to migrate if the present value of their net benefits is higher in the destination country than in the home country. Future migration potential for Germany after Eastern Enlargement may be derived from demographic arguments, the stock of foreign-

ers in Germany, and similar historical events, such as the EU Southern Enlargement. It becomes clear that some immigrants are actually needed for demographic reasons, to keep the welfare system functioning in the future. This need is calculated at some 450,000 immigrants a year, to prevent long-term decline in the population of Germany's ageing society. Results of calculated overall migration potentials vary very widely from 800,000 to 3,300,000 up to the year 2030, with an annual 200,000–250,000 in the early years, depending on the assumptions made.

There are expected impacts of this migration potential on the German labour market, since there is a huge potential for convergence based on differences in the labour markets of the CEECs and Germany. These impacts concern levels of qualification, wage levels and unemployment rates. Pressure on wage levels is expected to evolve in industries where domestic workers are substitutive, rather than complementary to immigrant workers. Such crowding-out effects are foreseen for low-skilled workers in Germany's manufacturing and construction industries. Studies generally conclude that incomes of low-skilled workers decrease and incomes of highly skilled workers slightly increase if immigrants are mainly low-skilled workers, while incomes of highly skilled workers slightly decrease and incomes of low-skilled workers increase if immigrants are mainly highly skilled workers. No remarkable impact of immigration on unemployment in the destination country was found, except a slight bias towards increasing unemployment among low-skilled workers. The EIC/DIW study, based on an immigration potential of 200,000 a year over a period of 10–15 years calculates decreasing wages (0.81 per cent) and increasing unemployment (0.54 per cent). Low-skilled workers, especially in regions directly bordering the CEECs, will face sharper income cuts than highly skilled workers. Still, the

⁸⁰ Sinn *et al.* 2000.

⁸¹ *Ibid.*, 323–36.

⁸² Boeri and Brücker 2000, 130–31.

consensus opinion in the studies is that the impacts on the German labour market in general will be modest.

A remarkable share of the migration potential is connected to wrong incentives resulting from higher social-security benefits in Germany than in the CEECs. Although the results calculated in studies vary widely, it can be generally assumed that immigrants in Germany are net beneficiaries of the welfare system, which results in additional, artificial migration incentives, especially among low-skilled workers, and thereby to an increased migration potential for Germany in the short term. The resulting fiscal burden might encourage the destination country to reduce benefits from its welfare system, releasing erosive forces of competition among EU welfare systems.

Against this background, the EU Council decided in 2002 that the free movement of labour would be limited for a two-year period that could be extended to seven years. A restrictive use of this transition period fails to mitigate possible pressures from migration on the labour market and the welfare system, but limiting free movement through work-permit quotas may prevent artificial migration drawn by the net benefits from the welfare system applicable traditionally to immigrants. The transition might make the migration potential for Germany more predictable and enable labour markets and the welfare system to adjust gradually to the migration flows.

But there are other reasons why benefits from migration may not be perfectly generated. The German labour market, like most in Western Europe, suffers an overload of restrictions and inflexibility, *i.e.*, inflexible and restricted working conditions, rigid wages, and powerful unions. These restrictions will probably act as barriers to evolution of the positive welfare effects on the German labour market to be expected from immigration of highly skilled labour, as rigid wages may prevent positive em-

ployment effects. But the German government has probably managed to mitigate the negative effects of migration on the labour market and welfare system in the early years by pressing for transition periods of limited movement of labour. But the transition periods will probably postpone at most the migration potentials and impacts on labour markets and the welfare system, so that this negotiated success should not be abused as a legitimate excuse for Germany's political elites to rest on their laurels and omit necessary structural reforms.

When analysing the potential impacts of Eastern Enlargement on the German economy today, and perhaps later in a follow-up review, it is indispensable to establish a strict causality. It is necessary to differentiate clearly between direct effects of Enlargement and what are inevitable consequences of restrictions and inflexibility in the German labour market or detrimental incentives in the welfare system. It should be top priority for Germany's political elites to dismantle such incentives and inflexibility, but there is also a need for evaluations by objective economists, so that misleading calculations of net results cannot turn this first Eastern Enlargement into a scapegoat for inadequate and insufficient political reforms. It should rather open up the prospects of further rounds of Eastern Enlargements to Turkey, Russia, Ukraine and Belarus.

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Table 1
DIW calculations of migration potential for Germany from the 10a CEECs, persons

	2002	2005	2010	2015	2020	2025	2030
Baseline projection for EU 15							
Stock of immigrants	1,159,804	1,987,718	2,907,367	3,437,146	3,721,613	3,853,542	3,892,345
as a percentage of EU 15	0.31	0.53	0.78	0.93	1.01	1.06	1.08
Baseline projection for German							
Increase in the number of immigrants	218,429	161,722	95,560,	53,720	27,509	11,320	1,539
Stock of immigrants	754,328	1,292,798	1,890,932,	2,235,498	2,420,512	2,506,321	2,531,556
Low projection for Germany							
Increase in the number of immigrants	175,189	126,204	68,758,	33,444	12,187	-201	-7,039
Stock of immigrants	711,088	1,136,369	1,585,359,	1,815,231	1,914,263	1,935,258	1,912,013
High projection for German							
Increase in the number of immigrants	241,443	183,537	114,117,	69,565	41,062	22,912	11,437
Stock of immigrants	777,342	1,383,485	2,080,670,	2,509,670	2,766,918	2,914,491	2,992,507

Source: Boeri and Brücker 2000; European Integration Consortium; Berlin and Milano.

Table 2
IFO calculations of migration potential for Germany from the 5a CEECs, persons

	Years after accession						
	0	1	2	3	5	10	15
	Relative income growth of 2% in the CEECs						
Net migration	0	193,000	240,000	248,000	225,000	133,000	60,000
Stock of immigrants	459,000	656,000	902,000	1,168,000	1,681,000	2,660,000	3,225,000
	Relative income growth of 0% in the CEECs						
Net migration	0	199,000	254,000	273,000	264,000	205,000	153,000
Stock of immigrants	459,000	662,000	921,000	1,209,000	1,790,000	3,064,000	4,055,000

Source: Sinn *et al.* 2000

Table 3
Labour markets in the CEECs and Germany – a comparison, as of 1995

	Population in working age	Labour force	Employees	Employment to population in working age	Gross annual wages and salaries
	In thousand persons			Rate in	Per employee in USD
10a CEECs average	72,182	48,207	37,788	52	3,101
Germany	55,714	38,483	31,248	56	40,999
EU 15	249,027	165,495	122,931	49	34,885
10a CEECs in % of EU 15	29	29	31	n.a.	9

Source: Boeri and Brücker 2000; European Integration Consortium; Berlin and Milano

Table 4
Long-term macroeconomic effects on Germany, changes in %

	Impacts of total migration	Impacts just of low-skilled migrants	Impacts just of the skilled migrants
Unemployment rate of domestic low-skilled labour (on a basis of 10.000%)	10.402	10.544	9.879
Unemployment rate of domestic highly skilled (on a basis of 6.000%)	5.890	5.912	5.977
Average unemployment rate (on a basis of 6.668%)	6.677	6.726	6.625
Wage level of low-skilled labour	-3.389	-4.251	0.921
Wage level of high-skilled labour	1.353	1.174	0.171

Source: Hejdra, B. *et al.* 2002; CESifo Working Paper No. 718 (7); May