Turkey and Europe: The role of migration and trade in economic development

The Present Picture: Facts and Figures

Currently some 32 million foreign citizens live in the EU 27, i.e. somewhat more than 6% of the total population of 500 million. The major part lives in the EU15, namely 29 million or 92% of all foreigners. Accordingly, in the EU-15 the proportion of foreigners amounts to 7% on average. The number and share of foreign born are even higher with some 40 million migrants, i.e. 10% of the EU15 population. Thus the EU15 have about as many foreign born as the USA. The US-share in the total population surpasses, however, the one of the EU15 (2008: 13.7%) given the smaller population size of the USA (311 million versus 396 million).

Migrants from Turkey represent a fairly small proportion of all migrants to the EU. In 2008 some 2.3 million foreign born from Turkey were counted, i.e. 6% of all foreign born in the EU15 and 0.6% of the total EU15 population. They live in the main in Germany (1.5 million), Austria (158,000), France (230,000), and the Netherlands (200,000). If one adds the number of second generation migrants from Turkey to the foreign born, i.e. those already born in Europe, the total rises to close to 4 million.

In the respective countries the share of foreign born from Turkey differs markedly. Austria has the largest proportion of foreign born from Turkey with 1.9% of the total population, closely followed by Germany with 1.8%. If one includes the second generation of Turkish origin, the proportion rises to more than 3% of the total population in either country. After Austria and Germany the Netherlands (1.2%), Denmark (0.6%) and France (0.4%) have significant proportions of migrants from Turkey in their populations. (Table 1)

While Turkey continues to be a country of outmigration it is also becoming a country of immigration. In the year 2000 (latest data available for foreign born by country of origin) some

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1 The population data is taken from EUROSTAT and US Census Bureau, the data on migrants from OECD [International Migration Outlook, various SOPEMI reports].
2 Turkish nationals constitute by far the largest single third country national group in the EU15, namely some 25%.
3 This proportion is somewhat lower than the one of Mexican born in the USA (11.8 million or 3.8% of total population).
1.3 million or 1.9% of the 67 million inhabitants were foreign born. In the year 2000 the share of Germans in the foreign born population of Turkey amounted to 21.4% (273,500) and of Austrians to 1.1% (14,300). The numbers and the share of Germans and Austrians in the Turkish population are growing, mostly highly skilled second generation migrants who return to their parents’ home country to take advantage of employment opportunities as Turkey is rapidly restructuring and in need of skilled workers to support the export led growth strategy.

The two EU-MS which are most closely connected to Turkey by migration are Germany and Austria. The trade linkages between the two countries are also significant. Currently, in Austria trade in goods with Turkey corresponds to the EU15 average which amounts to 0.35% of GDP. The trade linkage between Germany and Turkey is somewhat more pronounced with close to 0.5% of GDP. The share of exports/imports to and from Turkey amounts to about 1% of exports/imports of goods in Austria and 1.5% in Germany. This is somewhat more than in the EU15 on average.

Table 1: Population, migration, GDP and trade in comparison: 2009

<table>
<thead>
<tr>
<th></th>
<th>Total population</th>
<th>Foreigners</th>
<th>Foreign born</th>
<th>GDP at market prices</th>
<th>GDP/capita in PPS</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Persons</td>
<td>Persons</td>
<td>In % of total</td>
<td>Persons</td>
<td>in % of total</td>
<td>millions of</td>
<td>in % of GDP</td>
</tr>
<tr>
<td>Austria</td>
<td>8,355,200</td>
<td>864,397</td>
<td>10.3</td>
<td>1,277,000</td>
<td>15.3</td>
<td>274,321</td>
<td>29,300</td>
</tr>
<tr>
<td>Germany</td>
<td>82,002,390</td>
<td>7,186,921</td>
<td>8.8</td>
<td>10,820,800</td>
<td>13.0</td>
<td>2,337,510</td>
<td>274,402</td>
</tr>
<tr>
<td>EU15</td>
<td>396,352,256</td>
<td>39,189,928</td>
<td>7.4</td>
<td>39,351,200</td>
<td>9.9</td>
<td>39,314,364</td>
<td>26,000</td>
</tr>
<tr>
<td>EU27</td>
<td>400,705,550</td>
<td>31,799,000</td>
<td>7.2</td>
<td>41,622,000</td>
<td>8.4</td>
<td>11,787,481</td>
<td>23,000</td>
</tr>
<tr>
<td>Turkey</td>
<td>71,517,000</td>
<td>103,753</td>
<td>0.1</td>
<td>1,333,883</td>
<td>1.9</td>
<td>443,367</td>
<td>10,700</td>
</tr>
</tbody>
</table>

5: Eurostat, Worldbank.

In order to understand the role of migration and trade in economic development we first look at the dynamics of the two factors over time. Given the strong linkage between Austria and Germany on the one hand and Turkey on the other, we focus on these countries. Thereafter, we provide an overview of research on the question to what extent migration and trade are substitutes or complements in economic development. We relate the research findings to Europe and Turkey.

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4 The largest number and share of foreign born in Turkey are Bulgarians with Turkish origins, dating back to the Osman Empire. In the year 2000 (census) 480,800 Bulgarian born migrants were living in Turkey, i.e. 38% of all foreign born (OECD 2010).

5 Dustmann—Kirchkamp (2001) investigate the activities of Turkish immigrants to Germany who return to Turkey.

4 The trade data is taken from the UN-Databank.
The development of migration and trade in Germany and Austria relative to Turkey

After WWII, Germany and Austria embarked upon the reconstruction of their economies. It took some 10 years for Germany and 15 years for Austria to recover and re-establish economic growth. The ‘European Recovery Program’ (1947, Marshall Plan) played a key role in ensuring recovery by providing the funds and support needed to repair and reconstruct infrastructure (rail network, roads and bridges, housing), industrial plants and agricultural sites. Germany had a head start in economic recovery and reached full employment by 1955. Austria was less dynamic, hampered by large refugee inflows from Central and Eastern European countries on the one hand and substantial emigration of Austrians to overseas countries on the other (Horvath—Neyer 1996).

By 1960 Austria achieved full employment with an unemployment rate of 2.6%. Labour supply started to dry up as many skilled Austrians migrated to Germany, Switzerland and other European countries in the wake of social security agreements, attracted by higher wages. Accordingly, Austria chose the temporary foreign worker model already established by Germany to attract migrant workers from abroad. Germany had signed bilateral labour recruitment treaties: with Italy (1955), Spain and Greece (1960), Turkey (1961), Morocco (1963), Portugal (1964), Tunisia (1965) and Yugoslavia (1968). Austria did likewise (with Spain and Italy 1962, Turkey 1964 and Yugoslavia 1966). As the Austrian wage levels were very low in comparison to countries like Germany, Switzerland, France, it was not possible to attract sufficient numbers of foreign workers from Spain or Italy. Accordingly, Austria established recruitment centres in Yugoslavia (Beograd) and participated in the running of the German recruitment centres in Turkey.

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7 In 1947 the numbers of refugees made up 10% of the population (Nemschak 1955). Some 100,000 German speaking refugees and more than 100,000 Hungarians were integrated in Austria between 1945 and 1960 (Biffl 2011).
The institutionalisation of migration allowed rapid recruitment of migrant workers, above all from Yugoslavia, followed by Turkey, as the costs of migration were small. As Graph 1 indicates, the share of foreign workers in total employment rose fast in the 1960s until 1973 (with a peak of 8.7% foreign workers in Austria and 10.8% in Germany), when the economic recession put a break on foreign worker recruitment. Germany had a higher proportion of migrant workers than Austria until 1990, when the massive inflow of refugees in the wake of the break-up of Yugoslavia put Austria on the overtaking lane. Austria remained on the fast track until today with a share of foreign workers in total employment (wage and salary earners) of 13.2% in 2010, compared to 10% in Germany. (SOPEMI Report: Austria 2009/10)

While foreign workers from Turkey have become the single largest ethnic group of migrants in Germany, followed by Italians, this has never been the case in Austria. In 1973 they constituted about 14% of all migrant workers in Austria compared to 23% in Germany. In the course of the 1970s and 1980s the share of Turkish migrant workers increased, not so much as a result of recruitment — as a matter of fact, Germany stopped recruitment in 1973 — but as

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8 Workers were recruited in the host country, received a 1 year contract, travel costs were borne by the employer as well as accommodation costs, which had to correspond to the local housing standards. For Germany see Mehrländer 1980, for Austria see Biffl — OECD-SOPEMI reports.
a result of family formation and of refugee inflows. Particularly Germany received large numbers of asylum seekers, often Kurds, as a runner-up and in the aftermath of the military coup in 1980. As recruitment of foreign workers had been stopped, the request for asylum was the only way to enter legally. Accordingly, the share of Turkish citizens in total foreign employment increased to 34% in Germany in 1989 and to 23% in Austria. In the period thereafter, the inflow of refugees from Yugoslavia brought another wave of migrant workers which resulted in a decline of the share of Turkish citizens in foreign employment but not in their actual employment numbers. The adoption of citizenship reduced the share of Turkish citizens further; in Germany the introduction of ius soli for children born to migrants with permanent residence status in 2000 reinforced the declining trend.

The migratory process can be categorised into four stages (Böhning 1976, Biffl 1985/1986). In the beginnings, i.e. the first stage, the foreign workers from Turkey were largely unskilled and semiskilled labourers in the construction sector and in export oriented industrial production. In the second stage Turkish workers were increasingly concentrated in certain occupations and industries, in particular in consumer goods production, in particular textiles, leather, clothing, food processing, where they often had trade skills and in metal industries. This means that they became increasingly complementary to native workers, while in the first stage they had been potentially substitutable but scarce labour. In the third stage, which was characterised by a rise in employment of Austrian/German women and youth, the baby boom generation, on the supply side and economic restructuring on the demand side, the demand for the specific skills of the migrants declined. Accordingly, many Turkish migrants lost their jobs, often without access rights to unemployment benefits. In 1984, Germany initiated a repatriation scheme, mainly aimed at migrants from Turkey, offering financial incentives to return (Hönekopp 1987). Nonetheless few returned to Turkey and preferred to work on an irregular basis. Thus, the numbers of Turkish migrant workers stabilised but family formation or reunification provided endogenous dynamics to population growth. By the mid to late 1980s the fourth phase of the migration process had been reached, i.e. de facto settlement connected with the creation of ethnic business and associations, which act as stepping stones for trade linkages with Turkey.

**Rising trade linkages between Austria and Germany relative to Turkey**

It can be inferred from Graph 2 that Austria is a small open economy which is specialising in the production of goods and services for export markets, thus gaining economic growth through trade. The share of exported and imported goods and services in % of GDP is higher than in Germany; exports represent 55.3% of GDP in the year of 2010 and imports 50.5%. Austria has had a long tradition of a balanced trade balance, tourism filling in the gap between commodity exports and imports. In the year 2000 a trade surplus opened up as the traditional deficit in the commodity trade vanished and tourism expanded its market shares. Germany, in contrast, has traditionally had a trade surplus in the goods market but phases of
deficits in services trade. Accordingly, the balance of goods and services trade, which is
documented in Graph 2, equalized in the 1990s but turned into a surplus in the years of 2000.
Accordingly, the share of exports in % of GDP amounted to 45.9% and of imports to 40.7% in
2010.

Graph 2: Total exports and imports of goods and services in % of GDP: Austria, Germany and
Turkey (1960-2010)

Turkey had a remarkable export growth performance from the early 1980s to 2000, when a
stagnation and decline of exports relative to GDP set in. The boost to international trade in
the 1980s had its source in the shift from import substitution to a more market based export
orientation. The dynamics resulted from increased industrial exports while the value of
agricultural exports remained fairly stable over time. The major exported industrial products
were textiles, apparel, leather goods, electrical equipment, chemicals, later also iron and
steel industrial products. Turkey sustained a real export growth rate of 20% over the period
1980-1987. The growth was a result of macro-economic policy and trade reform linked to a
steady depreciation of the Turkish currency thereby promoting export growth (Arslan— van
Wijnbergen 1990). The stagnation in the years of 2000 was triggered off by a recession in 2001
(Graph 3). In the years that followed, a turnaround in capital flows gave rise to a financial
crisis which affected the real economy (Rodrik 2009). Accordingly, the share of exports in % of

GDP reached 21.1% in 2010, of imports 26.6%, signalling a significant trade deficit, which has been a feature of the Turkish economy for a long time.

Graph 3: Economic growth rate (real GDP) 1996-2010

Trade between Europe, in particular Austria and Germany, and Turkey, entails in the main commodity trade. Accordingly, we focus on the commodity trade linkage between Austria and Germany on the one hand and Turkey on the other in Graph 4. The data show that Austrian and German exports (goods only) to Turkey have been fairly low in the 1960s and 1970s relative to total exports. In the 1980s, exports of goods from Germany to Turkey rose steeply relative to total export development while they remained fairly stable in Austria in relative terms. Also imports from Turkey kept pace with export developments in Germany, at least until 2003, when the economic recession hit Turkey more than any other region in Europe. (Graph 3) In contrast, imports from Turkey to Austria were slow to pick up but began to converge to exports to Turkey from the year 2000 onwards.

The decline in Germany’s imports from Turkey since 2003 are a mirror image of the increasing macro-economic instability of Turkey. The limited sustainability of economic growth in Turkey is seen by many as a result of financial globalisation on the one hand and insufficient investment on the other, in particular in human capital (Rodrik 2009, Betcherman et al 2008).
The major challenge to stable and sustainable economic growth in Turkey is insufficient investment in the ‘productive potential’ of its workforce (Betcherman et al 2008). This shows up in a comparatively low labour force participation rate, in particular of women (in 2009 27.8% compared to 65.8% in the EU15). Labour force participation of women has been declining in Turkey since the late 1980s (1989: 36.3%). The decline has been more pronounced than warranted by the decreasing share of agriculture in total employment and the rural-urban population shift. In Europe migrant women from Turkey tend to have a lower labour force participation rate than native women, namely by some 10 percentage points in Austria and Germany. (Graph 5)

Furthermore, the educational attainment level of the work force is very low, particularly of women. In 2009 78% of all 25-64 year old women had lower secondary education as their highest educational attainment level (men 66%) compared to 32 % in the EU15 and 24% respectively 17% in Austria and Germany. The skill composition is highly polarised in Turkey, contrary to Austria and Germany, where some 60% of the 25-64year olds have medium level skills, often of a vocational nature (compared to some 13% in Turkey).

The share of university graduates is comparatively high in Turkey, however, with 14% of men aged 25-64 and 9% of women. (Graph 6)
The low educational attainment level of the population is all the more worrying as there is slow progress in the educational attainment level of youth. The school-to-work-transition today is not smooth; not only are the unemployment rates of the 15-24 year olds high but their inactivity rates (out of the labour force) are also high. If the Turkish economy does not generate more and better jobs for youth, the large youth cohorts can be a source of social unrest and raise the pressure to migrate. This is a matter of concern in view of accession of Turkey to the EU.

Currently, Turkey is a large country in population terms but a small country in economic terms. With a population size of 71.5 million in 2009 the value of its GDP at market prices (millions of Euro) amounted to 440,367 compared to 274,321 for Austria, a country with 8.3 million inhabitants. Thus GDP per capita (PPS) is only 36% of the Austrian and about half the EU27 level. (Table 1)

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9 Also in Austria and Germany Turkish first and second generation youth have above average problems in school and in the transition from school to work. The PISA results indicate that youth of Turkish migrant background are less successful than other migrant groups (OECD 2006). The scores of Turkish migrants are equally low in Austria, Belgium and Switzerland and lower still in Germany.
Are trade and migration substitutes or complements

Globalisation is associated with increased international mobility of capital and, to a lesser extent, also of labour (Biffl, 2000, Solimano, 2001). In the case of Europe and Turkey, the contrary holds, labour flows surpass investment and trade flows. This represents an obstacle for EU membership of Turkey. Despite an association agreement which dates back to 1963 and a customs union with the EU since 1995 and the beginning of accession negotiations in 2005, EU membership of Turkey is not yet in sight, not least for fears of large numbers of Turkish migrants in the wake of free mobility of labour.

Why this fear of Turkish migrants? It may stem from a general view that commodity trade is in the main a win-win situation, while migration gives rise to increased inequalities and results in winners and losers. This view is reflected in the fact that countries tend to impose restrictions on labour mobility while at the same time removing barriers to the free flow of goods and services across borders (GATS), thus discriminating against labour mobility in favour of international trade. This may be a contributory factor to the rising number of illegal migrants who endeavour to improve their economic situation by migrating even if it means working in the informal sector (Ghosh, 1998/99).
This view raises the following question: Which is valid - the policy assumption that trade and migration have different impacts on economic growth, the labour market, prices and income distribution; or, the theoretical proposition that they are in the main substitutes and thus can be expected to have similar impacts? If the latter is true, a freer movement of people may be justified on economic grounds and not only on humanitarian and social grounds. If, however, migration and trade are only substitutes under certain conditions, priority may be given to trade rather than migration in particular circumstances of socio-economic development.

The objective of this paper is to try and establish under what conditions, in theory and in reality, substitutability applies, on the one hand, and under what conditions trade takes precedence over migration on the other. It is assumed that the impact on the labour market of migration and trade is similar in the case of substitutability but differs, if other forces are at work. Finally, the statistical and theoretical background will provide the basis for considering the practical implications for the countries concerned.

A theoretical perspective

It is useful to begin by considering certain theoretical propositions. Traditional trade theory rests on the assumption that unique characteristics of countries give rise to different relative production costs, i.e. comparative cost advantages, which make each country better off after trade. They are the driving forces of trade between countries with differing labour productivities (Ricardo, 1817) or factor endowments (Heckscher 1949, Ohlin 1933, Wood 1994).

This theory provides a rationale for inter-industry trade between different regions, in which relative production patterns are determined by the relative supply of factors and relative prices. The original models of Ricardo and Heckscher-Ohlin have been supplemented over time by the 'new trade theories' which introduce innovation and changes in technology as factors that give rise to different national competitive advantages and thus to trade specialisation. (Posner 1961, Krugman 1980) Accordingly, less developed countries will specialise in the production of mature goods, e.g. textiles, apparel, with standardised production processes and large inputs of low-skilled labour, while more developed countries will specialise in human capital intensive and high technology intensive production. Trade will contribute to an international equalisation of factor and goods prices. The new trade models also provided a rationale for the phenomenon of intra-industry trade; they stressed that in the absence of differences in endowment and technology, product differentiation, increasing returns to scale, imperfect competition and demand preferences may provide a rationale for such trade (Helpman & Krugman 1985.) In that vein, Ben-David (1994, 1996) argues that trade between countries like the EU (15) member states with roughly equal economic development levels, causes incomes to converge due to a rapid transfer of modern technology.
Mundell (1957) was the first to clarify that factor mobility and international trade are only substitutes in the case where factor proportions, and thus international factor prices, differ between countries, i.e., the Heckscher-Ohlin case. However, relative factor endowments can, in practice, be modified by migration and/or FDI. If, for example, exports are seen as the vehicle for economic growth, in the absence of an adequate local labour supply, migrants may be employed in the production of export goods in order to preserve the competitiveness in terms of cost and prices of the export industry. In this case, migration ensures that the export industry is sufficiently endowed with those factors of production, which are intensively used in the production of export goods. Thus, according to the traditional and new trade theory, migrants will tend to flow disproportionately into those export oriented industries which are using labour intensive technology in the production of goods. Markusen (1983) points out that international differences in wages generate labour movements which — if employed in the tradeable goods production sector — result in an increase of exports.

If less developed countries expand their production capacity, e.g., in mature industries like textiles and clothing, a transfer of production sites from high-wage countries to low wage countries will ensue if transport costs are low enough to warrant such a transfer. Therefore, commodity trade will be the major vehicle for meeting the demand for mature goods. This would result in a decline in mature industry employment in the high-wage country and an increase in employment in the low-wage country.

Another theoretical approach is provided by the 'new economic geography' models (Krugmann 1991/1993, Puga 1999, Ottaviano & Thisse 2003) which introduce a new feature into trade theory, namely that trade and migration may, under certain circumstances, not promote factor price equalisation across regions and countries. An initial shock, e.g. the reduction of trade costs below a certain critical value or the prospect of increasing returns to scale in an industry, may generate flows of mobile workers and firms into core locations (increasing returns industry) while other regions preserve their traditional production and immobile work force. Thus a core-periphery industrial structure develops endogenously. In such a case, factor movements may promote a divergence in factor prices between the core and periphery. This happened, for example, in the case of Silicon Valley, where highly skilled scientists moved into that region because of the potential for increasing returns. The concentration of highly skilled and highly paid scientists in Silicon Valley contributed to a

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10 Thus migration changes the relative factor endowments, a point Rybczynski (1955) made in his seminal paper, in which he points out that resource changes affect relative commodity prices. Factor price equalisation will occur if the trading partners specialise. Only in that case will the trading partners be well endowed with the factors used intensively in the production of export goods.

11 This is the counterpart to the point first made by Kaldor (1981) that trade between unequal partners may cause divergence in incomes if trade shifts the structure of production in the developed country towards industries with high growth potential (knowledge intensive production) and in the less developed countries to industries with low growth potential.
widening of factor prices between Silicon Valley and the adjacent regions. Another case is
the concomitant movement of highly skilled labour (management) and capital (FDI) from the
Western developed countries to Asia to promote export led growth (Pang Eng Fong & Linda
Lim, 1996, Lim, 1980). The establishment of export processing zones in Mexico is of a similar
nature in that FDI and management are complements and are imported in order to tap the
locally abundant resources of less skilled labour which are employed intensively in the
production of export goods (see Sassen, 1988, 2002). In that case, factor mobility is a
prerequisite for the establishment of the production potential which will result in increasing
trade up to the point where specialisation has reached a free trade equilibrium, i.e., a point
where a further increase in factor mobility will lead to a reduction in commodity trade12.

To sum up, theoretically, international trade in commodities may take place because of: (1)
an unequal relative factor endowment (Heckscher-Ohlin), (2) unequal technological
development levels, increasing returns to scale (Melvin, 1969, Krugman, 1980 & 1991), and (3)
imperfect competition on goods and/or factor markets (Melvin & Warner, 1973, Markusen,
1981, 198313. Migration may act as a substitute for trade but, as shown above, not in all
circumstances.

While migration can play a role in the promotion of commodity trade and thus in the
production of tradeables, the issue that remains to be considered is why migrant labour may
be employed in the production of non-tradeables. Non-tradeables do not face competition
from abroad but only from within the country. The industries concerned include housing,
private sector personal and consumer oriented services and public sector services, like
education, health and welfare services. In the case of public goods, the pressure for keeping
costs down comes from budgetary constraints14; in the private sector, it comes from limited
consumer demand. Personal services tend to have limited scope for productivity growth in
the technical sense, i.e., the ratio of inputs to outputs. For example, the student/teacher ratio,
the patient/nurse ratio or the consumer/hairdresser ratio, cannot be reduced by technology
to the same extent as business oriented services or the production of manufactured goods, if
the quality of the service is to be preserved. Thus, the costs of these labour intensive services
relative to manufactured goods tend to increase over time if wage disparities are not to
exceed conventional social norms of fairness. In those occupations in which wages do not
rise in line with the rest of the economy, such labour may become scarce. In order to ensure

12 Factor price equalisation will not occur as long as the trading partners are diversified.

13 Markusen points out that factor mobility may limit monopoly power in product markets, but also in labour markets –
a point of particular relevance in the context of Eastern European enlargement of the EU. Services mobility and thus
cross-border trade affects the goods market and thus impacts on the production of goods for local demand – in
particular housing industry. By that token it also reduces the monopoly power of construction workers, a highly
unionised industry in Austria, which has so far profited from their almost exclusive production for local demand.

14 Governments face budgetary pressure from expenditure in competing programmes while being constrained
politically from increasing taxes or incurring budget deficits.
sufficient labour supply, labour may have to be drawn from abroad, i.e., migrant labour represents a means to keep costs of non-tradeables low. Thus, migrants can be expected to be employed dis-proportionately in low wage/low skilled jobs in the area of non-tradeables, e.g., cleaning and domestic services, where Turkish women often find their jobs.

**Empirical evidence of the impact of trade and migration on the labour market**

We turn now to consider the empirical evidence to test the theories. Many factors influence labour market outcomes, and to isolate the effect of trade and migration on labour market outcomes is not an easy task. Important in the analysis of the impact of trade on the labour market is the impact of trade on industry structure and thus on the demand for labour. In an open economy, changes in trade reflect changes in the structure of demand for goods and services; while the resulting changes in the allocation of labour to the various industries reflect changes in the structure of production of tradeables and non-tradeables. Thus changes in the composition of traded goods and services as well as changes in net trade have an impact on the labour market. The centre of concern in this connection is with the problems of industry restructuring and reallocation of labour from declining to growing industries, with intermittent periods of unemployment, wage variability, retraining and geographical relocation of labour. Such adjustment costs may outweigh the gains from trade, at least in the short term.

A large body of literature (see Helpman and Krugman, 1985, Haynes et al., 2002) maintain that the impact of trade on labour markets differs as between inter- and intra-industry trade. According to this literature, the risk of creating unemployment or lowering wages is higher under increased inter-industry trade, i.e., a demand shift of labour away from an industry, than within an industry. An explanation for the view that the labour adjustment costs of intra-industry trade are lower compared to inter-industry trade is that there is greater similarity in the structure of skills of workers within industries than between industries. In consequence, occupational wage differentials, which can be taken as an indicator of labour specificity, are larger between than within industries. The laid off workers in the declining industry will find it hard to fully transfer their skills to another, growing industry. They may be confronted with various options, e.g., downskilling and thus wage declines, or upskilling or re-skilling and effectively investing in human capital. A case of downskilling are Turkish workers in Austria, who lost their jobs in the wake of relocation of production to Central and Eastern European Countries following the fall of the Iron Curtain. In the absence of sufficient and adequate reskilling, often due to inadequate language skills, both migrant men and women had to

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15 The seminal paper was from Balassa (1966) who saw the reason for the smooth adjustment of the EEC-countries to greater economic integration in trade expansion taking mainly the form of intra-industry trade (smooth adjustment hypothesis).
contend with jobs in cleaning services. In contrast, native workers tended to be up- or reskilled to take up jobs in the fast growing higher end of the value added chain of the same industry. Thus, the research results have to be qualified. Haynes et al. (2002) show that workers moving within industries fare no better nor worse than workers moving between industries as long as no occupational change is involved. Since a move between industries is more often linked to occupational change than intra-industry mobility, the adjustment cost of the latter is not as high on average. This explains why inter-industry trade is said to cause higher wage variability and unemployment than intra-industry trade, assuming that labour redundancy in the latter is transient.

On the other hand, Lovely and Nelson (2002) show, however, that it is difficult to separate inter- and intra-industry trade and their effect on the labour market. Pure intra-industry trade may generate inter-industry trade via supply and demand adjustments. Take as an example the relocation of textile and clothing production from Austria to Bohemia in the first half of the 1990s. It was planned as an element in a value chain, Austria investing heavily in the artistic design part of textiles, in computer aided cutting of cloth, and marketing of the final product at home — thus promoting economic and job growth in Austria in business oriented services — and transferring the labour intensive stages of production to Bohemia — thus dismantling production entities (production equipment and machines) and relocating them to Bohemia16. Austria’s value share of the final product has remained as high as it was before the transfer of production while the relative final goods price has declined as a result of trade liberalisation and specialisation. Given a certain price elasticity of demand for the final product, a positive income effect ensues, raising domestic demand. Thus, final goods demand may shift and in turn affect labour allocation in the production of goods and services. This example makes clear that the changing pattern of trade cannot fully explain the reallocation of labour in the whole economy and not even in the tradeable sector, without considering price and income elasticities of domestic demand.

Trade in goods and services affects labour demand while migration primarily affects labour supply, at least in the short run17. While migration is to a certain extent demand driven, autonomous forces can also promote migration, e.g., family reunion and refugee movements. The skills of the latter tend to be below average and thus augment the unskilled and semiskilled domestic labour supply. Migration research indicates that migration may contribute to a rise in unemployment and to a widening of wage differentials; this is the case in which migrants are concentrated in skills/occupations which are facing a decline in

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16 In Austria, job opportunities were created in occupations in which the traditional skills of textile and clothing workers are not of much use. Thus the laid off workers bore the negative adjustment costs – or the public sector by subsidising their investment in re- and upskilling.

17 In the long run, of course, migrants may be expected to affect demand as well through their consumption patterns.
relative demand, i.e., if labour supply growth as a result of immigration outpaces labour demand growth in those specific skill segments (Borjas, 1990, Stalker, 1994, Faini, et al. 1999). Borjas, Freeman and Katz (1992) point out that the large share of new immigrants with less than high school education in the USA in the 1980s (often Mexicans) and the concentration of the trade deficit in industries which intensively employ unskilled labour (import substitution)\(^{18}\) have contributed to the declining earnings and employment opportunities of unskilled workers in the US. They estimate that 30 percent to 50 percent of the decline in the weekly earnings of unskilled workers in the 1980s can be attributed to trade and immigration flows. These results are consistent with research into the effect of trade on earnings and employment at the industry level (MacPherson & Stewart, 1990), but contrast with research results of labour economists (Butcher & Card, 1991, for a literature survey see Pollan, 2000). The latter tend to underestimate the labour market effects of immigration because they tend to focus on segments of the labour market rather than the change in economy wide factor endowments.

However, Krugman (2002) points out that America’s widening income differentials cannot be attributed to the combined workings of growing international trade and skill biased technological change only but also to changed social norms, in particular a change in corporate culture\(^{19}\). Krugman in effect says that wage differences in a country are not so much the result of differences in labour productivity and therefore the result of economic forces of demand and supply, but mainly because of social norms which define limits to inequality.

To sum up, on the basis of empirical evidence, the effect of migration on the labour market depends on the occupational and skill mix of the migrants. If they contribute to a larger labour supply increase in certain skill segments or occupations (supply push) than warranted by demand growth (demand pull) they lead to a widening of wage differentials and/or unemployment; the weight of one or the other depends on the degree of wage rigidities, i.e., monopoly power, in certain sectors of the labour market.

**Practical implications in relation to Turkey**

In the 1950s and 1960s substantial migration of in the main low skilled workers from Turkey to Germany and Austria set in as wage differentials and differences in the degree of unused

\(^{18}\) Imported goods may be substituted for domestically produced goods thus driving the least efficient producers of that good in the domestic market out of business. Thus, as the share of imports in a particular goods market rises, productivity of production increases with the usual detrimental effect on employment and earning opportunities in the production of that traded good.

\(^{19}\) Economists are only starting to analyse the effect of a changeover from managerial capitalism to investor capitalism – a rise of institutional investors – since the 1980s on economic growth and income inequality.
labour resources were high and migration costs due to recruitment were low. Immigration to Germany and Austria continued even though unemployment and wage differentials decreased between the source and host countries. It was not until the years of 2000 that massive migration flows from Turkey to Germany and Austria came to an end and re-migration set in. In 2008, 9,900 Germans, often of Turkish background, migrated to Turkey while at the same time 26,700 Turks moved to Germany (net immigration to Germany of 16,800). In the case of Austria, 5,000 Turks migrated to Austria while less than 1,000 Austrians moved to Turkey (OECD 2010). Traditional trade theory suggests that the slow down in net migration and the onset of reciprocal migration flows is linked to increasing trade flows, often linked to the relocation of low tech production from Germany to Turkey and rising intra-country trade.

Akkoyunlu—Siliverstovs (2006) calculate the migration potential between Germany and Turkey on the basis of a migration function, taking host-home country income differentials, host-home country unemployment rates and trade flows over the period 1963 to 2004 as explanatory variables. They conclude that trade and migration are complements as far as Turkish migration to Germany is concerned.

Bruder (2004) comes to a different conclusion, however. She finds no significant impact of labour migration on trade. She argues that the increasingly endogenous migration dynamics due to family reunion in Germany reduce the direct linkage between migration and trade.

Insel—Cakmak (2010) take a different viewpoint by analysing the period 1980 to 2007. They find out that Turkish immigrants to Austria, Germany and other major European immigration countries of Turkish citizens have an impact on trade with Turkey due to preference and network channels. They demonstrate that Turkey’s exports to Europe are strongly influenced by the consumer preferences of Turkish immigrants for home country products, mainly after 1996 in the wake of the Customs Union Agreement. On the other hand, Turkish migrants contribute to Turkey’s imports from Europe, in particular of intermediary and capital goods through the network channels. By sending on average more than 2 million Euros of remittances annually to Turkey, the Turkish migrants in Europe contribute to investment and consumption in Turkey, thereby promoting economic growth. This point is examined in more detail by Akkoyunlu—Khodolilin (2006). They conclude that remittances buffer above all the negative consequences of economic volatility in Turkey for poor households, thereby stabilising consumer demand.

Empirical research is thus not clear about the relationship between migration and trade between Germany and Turkey in the current economic development stage of the two economies. Socio-economic and political forces in Europe tend to favour trade rather than low skilled immigration as economic development tools. This may have something to do with the relatively easy measurability of the benefits of trade. In contrast, the net benefits of immigration are not so easy to establish as the boost to economic growth has negative

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20 On the basis of research which investigates how trade affects migration, see Schiff 2000, Venables 1999.
effects which may be deferred and difficult to measure. They may show up in integration costs like bilingual education, prices of scarce resources like housing, in measures to maintain social cohesion, in increased demand for welfare services and/or public infrastructure like health care. Thus the distribution of economic gains from migration across all members/groups of society remains an open question.

Concluding Remarks

The German and Austrian level of economic and technological development cannot, in the present circumstances, accommodate rising numbers of unskilled migrants; the latter would contribute to increased unemployment or to the widening of earnings differentials between unskilled and higher skilled workers, either of which would jeopardise social stability. Only population ageing provides an argument in favour of increased migration independent of skills. A major challenge remains, however, the provision of adequate education and training for migrants such that they can fully participate in the specialised economic production processes of a learning society to which Austria and Germany have set their sights.

Such a development suggests that education and labour market institutions face a great challenge. If unemployment and/or increased wage dispersion are to be avoided, they will have to ensure that the skills of the workforce, including migrants, will be adapted to the new needs arising from flexible specialisation of production and the relative decline of standardized mass production.

The development of a system of continued learning and re-skilling of the workforce, which promotes the adjustment of skills to the changing needs of the market, will take off some of the pressures from wage policy in order to bring labour supply in line with demand requirements. The success rate of such a system will show up in less pressure to widen wage scales or to increase unemployment resulting from the workings of market forces, with less risk of undermining social cohesion.

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