

MASTERARBEIT

‘Macroeconomic Developments in Turkey and a Comparison of Immigration Simulations with respect to Turkey’s EU Membership Prospect’

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ABSTRACT

Negotiations between Turkey and the EU have started in October 2005. Turkey's accession to the EU would have important economic, political and social impacts. While the economic effects of such an accession are considered to be beneficial for both Turkey and the Union, the political and socioeconomic consequences are still reasons of heated debates among European member states.

One of the most important socioeconomic aspects of Turkish accession is migration. The aim of the underlying master's thesis is to forecast the potential migration from Turkey to the EU as a result of full EU membership and removal of restrictions on labor mobility. In order to achieve this, firstly, macroeconomic and sectoral aspects of Turkey's international trade performance will be examined. The following chapter will look at Turkey's fiscal, monetary as well as banking and exchange rate policies.

Based on the macroeconomic and sectoral developments, the last major chapter will deal with the implications of EU membership on migration flows. As a first step, Turkey's labor market during negotiations, eventual EU accession and transition will be examined. Then, the effects of international and illegal migration on Turkey-EU relations will be discussed. Migration models and the comparison of growth and migration scenarios for Turkey and the EU constitute the main parts of the thesis.

Two migration models will be provided in the thesis – one that sees migration as an investment in human capital, and another one which takes uncertainty about earnings under consideration and sees migration as an investment decision. In the first model, migration is dealt within a cost-returns framework. A potential migrant will leave the source area only under the condition that the costs of migration are equal to or less than the difference of the present discounted values of benefits in the source and destination country. Migration then will depend on two factors: the net real income and the employment opportunity.

In the second model, the one under uncertainty, according to the optimal allocation idea, all potential migrants will try to maximize their utility function in which there is a risk coefficient. Migration hence will depend on two factors: the average income level and the unemployment rate in the source as well as potential destination area(s).

In the final part of the thesis, two different scenarios have been made for Turkey in its path towards the EU: a successful accession period characterized by high growth and free movement of labor from 2015 on; and the opposite picture – failed accession, low growth and strict restrictions on labor mobility. The first simulation is based on migration estimations (using the seemingly unrelated regression method) to Germany (as 'Large Country Sample')

from 19 other European countries. Taking the successful accession and free mobility of labor - scenario of EU member states as a benchmark, it is determined that the Turkish migrant stock will follow a smooth curve until 2030. In contrast, in the 'guest worker' scenario, there will be a jump in the number of migrants around the year 2015. Nevertheless, even in the second case, the net migration flow is not drastic.

The second simulation takes as reference group the three southern cohesion countries – Greece, Portugal and Greece, which showed similar labor market characteristics to Turkey during their accession periods. Both scenarios render similar results to the first simulation: A successful accession period with high growth and positive expectations will reduce the migration pressure.

The third simulation takes solely Turkey's own migration experience from 1967 on as reference. In the positive scenario, there is a significant jump on migration and hence the results exceed the ones of the three southern cohesion countries to a certain extent. Nevertheless, in case of suspended EU membership, the net change in the Turkish migrant stock will be much more significant – almost twice as much as in case of succeeded membership.

1. INTRODUCTION

Turkey is the longest standing associate partner of the European Union (since the Association Treaty of 1963). Long after its application for full membership to the EU (in 1987), its status was recognized as a ‘candidate state destined to join the Union on the basis of the same criteria as applied to other candidate states’ in 1999¹. Negotiations for membership, however, have started only in October 2005.

The European Union of the 21st century is doubtlessly a different organization from the European Economic Community where Turkey had first applied for membership². On the one hand, the policy areas of the supranational organization have increased immensely; and on the other, the number of member states has grown to 27. Not only has this situation made the Union bigger and politically stronger, but also has it made the decision-taking mechanism more complicated. Furthermore, the so-called ‘enlargement capacity’ of the EU has decreased after the big 2004 enlargement.

Turkey’s accession to the EU would have important economic, political and social impacts. While the economic effects of such an accession are considered to be beneficial for both Turkey and the Union, the political and socioeconomic consequences are still reasons of heated debates among European member states.

An Overview of the Economic Situation in Turkey

Turkey has faced several economic crises in the last decades, the last ones known as the ‘twin crises’ of November 2000 and February 2001. The mentioned financial crises have been triggered by first, the weak external position originating from the excessive debt burden combined with the loss of competitiveness; second, the weak fiscal position caused by very high levels of interest payments on domestic borrowing; and last but not least, the weaknesses in the financial and banking sector³.

Nonetheless, the period after 2001 can be described as a period of stabilization and economic revival. The economy has been recovering and stabilizing, partly due to sound monetary and fiscal policies and structural reforms supported by stand-by arrangements with the IMF and partly due to political stability and start of negotiations with the EU. The fact that the last

¹ http://www.tbmm.gov.tr/ul_kom/kpk.pre1.doc, 2007.

² Brusse, Griffiths, ‘Good Intentions and Hidden Motives: Turkey-EU Relations in a Historical Perspective’, 2004, p.14.

³ Özkan, ‘Currency and Financial Crises in Turkey 2000-2001: Bad Fundamentals or Bad Luck?’, 2005, vol. 28, issue 4, p. 541-572.

Asian crisis did not cause the same impact it would have caused in the 1990s can be regarded as a sign that Turkish economy has been improving.

The real growth rate of gross national product, which averaged around 3.7% in the period between the crises of 1994 and 2000-2001, has been well above 5% since then. Between 1980 and 2000, even when the growth rate of international trade was very low and some countries with strong economies fell into recession, Turkey's export volume was increasing at an average rate of 13%. In this period, Turkey's export orientation of production improved well. While the share of exports in GNP accounted for only 4.2% in 1980, the value came to 19.8% in 2000. Nevertheless, the trade deficit has been increasing also; it rose from \$42.9 billion in 2005 to \$52 billion in 2006.

In addition, the private as well as the public balance sheets have become stronger. As public debt ratios have been considerably reduced and banks have higher profitability, financial markets have strengthened and stock prices have increased.

However, Turkey has new vulnerabilities such as a large current account deficit and rapid credit growth that are main reasons of shifts in investor sentiment. Moreover, the country faces structural challenges including widespread informality, fiscal spending pressures, low financial intermediation and electricity supply problems which slow down the country's growth and decrease employment⁴. These have to be dealt with in order to achieve a faster convergence to the EU average levels.

The major labor market problems are income inequality, youth unemployment and informality in several sectors. In the last few years, a decrease in the unemployment rate was not observed. The unemployment rate in Turkey being 10.3% in 2005, was slightly above that in Germany (9.5%), France (9.7%) and below that in Poland (17.7%)⁵. However, the official employment rate being only 46% (in 2005) was below the EU average and almost half of the rate in some European countries such as Iceland (83.8%). The rather low employment rate in Turkey can be explained through the huge informal sector on the one hand, and the large number of women not working and not looking for a job, on the other.

Policy priorities should be given first to the tightening of monetary and fiscal policy, so that real interest rates can be lowered further and current account can be adjusted; second to the reduction of the heavy tax burden on labor as well as on financial transactions; and third to making the economy more resistant to external shocks and preserving market confidence⁶.

⁴ Giorgianni, 2007.

⁵ OECD, 2007.

⁶ OECD, 2006.

Economic Assessment of Turkish Accession

The economic impact of Turkey's accession to the EU would be similar to that of the ten new central and eastern European member states, especially considering the budget flows. The estimated flows in the first three years after the accession are €45.5 billion⁷.

In 2006, Turkey's economy accounted for only 2.81% of EU25 GDP. Assuming an average annual growth rate of 5% for Turkey and 2% for the EU, it would be equal to 3.65% of EU GDP at the time of the nearest possible accession date of 2015. The GDP per head at purchasing power parity (\$5349 in 2006) in Turkey is only 17.76% of the EU average. Thus, in terms of GDP, Turkish accession would have only a modest impact on the EU.

Lower factor prices in Turkey would enhance foreign direct investment as well as the trade. The opening of the public procurement markets, liberalization of the trade in services as well as the abolition of restrictions on the freedom of establishment from both sides would improve the trade further from the Customs Union, which covers the trade in industrial goods and agricultural products⁸.

Another area of crucial importance is the large Turkish population. Similarly to Germany, Turkey is expected to have a population of 82.1 million in 2015, which would be slightly more than 14% of total EU population by that date⁹. By 2025, however, Turkey would be the largest EU country in terms of population, accounting for 15.5% of the total number. In order to enhance its economic potential, Turkey has to undertake education and labor market reforms, whereas the EU could profit from net migration flows from Turkey as it will need labor to counterbalance its aging demographic profile.

The expectation of Turkey's accession to the EU has resulted in a positive mood in Turkish economy. It has contributed to the economic recovery and sustainability and has enhanced foreign direct investment. Nevertheless, FDI in Turkey has not reached its potential yet.

Current Problems and Issues of Discussion (2007)

The accession of Turkey to the European Union would change the decision-taking mechanism by changing the balance of members' seats in the European Parliament and Council. Beside the 'acquis communautaires' and Copenhagen criteria, which every member state has to accept and fulfill, several other political issues such as the Cyprus conflict and socio-economic questions like immigration to the EU are being considered as problematic areas.

⁷ Hughes, 'Turkey and the European Union: Just another Enlargement?', 2004.

⁸ Lejour, 'Turkish EU Membership: Institutional Reforms Determine the Size of the Economic Benefits', 2004.

⁹ Hughes, 'Turkey and the European Union: Just another Enlargement?', 2004.

Moreover, although the negotiation process with Turkey has been started, discussions among the current member states about the absorption capacity and the frontiers of the Union are continuing. However, the political aspects are not part of this thesis.

Turkey's accession to the EU would have mutually beneficial economic effects. A special emphasis will be put on the migration flows from Turkey to the EU which will have significant socioeconomic and political impacts depending on the skill composition of the migrating labor force.

This thesis will firstly examine the macroeconomic and sectoral aspects of Turkey's international trade performance. The following chapter will deal with the macroeconomic policies. The fourth major chapter will try to assess the implications of Turkish-EU membership on migration flows. Finally, Chapter 5 will conclude.

2. MACROECONOMIC AND SECTORAL ASPECTS OF TURKEY'S INTERNATIONAL TRADE PERFORMANCE

One of the most important economic criteria for membership to the EU is the Copenhagen criterion stating that the candidate country must have a functioning market economy and be able to withstand competitive pressures within the enlarged Union. Whether a candidate country will be able to cope with competitive pressure and market forces depends strongly on its own economy as well as the economic situation of the member states at the time of accession. In case of Turkey, the nearest possible date of accession would be 2015, for which the conditions are difficult to predict.

This chapter will first illustrate the macroeconomic background for Turkey's competitiveness and the structural changes in domestic economy. The next part will look at the competitiveness and trade performance of the Turkish manufacturing industry on EU markets. The third part will demonstrate the sectoral aspects of competitiveness and trade performance. Finally, a brief assessment will be made for Turkey's competitiveness.

2.1. Macroeconomic Background to Turkey's Competitiveness and Structural Changes in the Domestic Economy

2.1.1. Macroeconomic Background and Policies

Since 1980, Turkey experienced major changes through liberalization reforms putting an end to protectionism as well as to state dirigisme. The 1980s as well as the 1990s were marked as decades of economic development, high growth and industrialization. In order to achieve a more stable economy and enhance the economic competition, growth strategies aiming at increased exports, sustainable growth and positive balance of payments were developed¹⁰.

Between 1980 and 2000, the amount of exports increased tenfold while the export goods gradually shifted from agricultural to industrial products. The economy has opened up; through the abolition of barriers to foreign trade (e.g. through the Customs Union Agreement in 1995) as well as the encouragement of foreign direct investment.

After the crisis of 1994, Turkey faced twin financial (and banking) crises of 2000 and 2001 showing the economy's resilience. The twin crises happened during the course of following

¹⁰ <http://www.turkey-now.org/Default.aspx?mID=5&pgID=50&langid=1>, 2007.

an IMF supported economic program initiated in December 1999 in order to establish macroeconomic balances, to reduce the inflation rate and to undertake structural reforms.

Following the sharp devaluation and crisis in 2001, an IMF supported restructuring program was implemented which included the restructuring of the banking system, the independence of the Central Bank, the closure of extra budgetary funds as well as strong fiscal policies. The government undertook regulatory reforms and further privatization of some major institutions such as state-owned banks. The Banking Regulation and Supervision Board was established as a central authority to regulate, supervise and observe the banking sector. As a result of the program, growth resumed, and inflation was reduced to single-digits and thus to the lowest levels in 35 years. The debt to GNP ratio went down. Economic growth has continued until 2008.

The average real GNP growth rate of Turkey has been 5.5% between 1984 and 1993. In the period between the 1994 crisis and the year 2000 the real GNP growth rate reached an average of 3.7%¹¹. In that time period, the industrial base was broadened while the exports of goods and services increased. The financial markets also expanded. The annual real GDP growth rate has been declining from 8.9% in 2004 and 7.4% in 2005 to 6.0% in 2006 and 5.0% (estimated) in 2007¹².

In spite of the economic recession in world markets, in the period between 1980 and 2000, the increase in exports averaged an annual rate of 13%. The amount of exports grew from USD 2.9 billion in 1980 to USD 35.7 billion in 2002. At the same time, the share of exports in the GNP rose from 4.2% to 19.8%¹³.

Industry, which accounted for 25.4% of GNP in 2006, is the major growth sector and provides 20% of total jobs. The industrial sector makes a substantial contribution to Turkey's economic growth, especially through exports. The immense growth in the exports can be regarded as a result of the limited recovery of the domestic demand and post crisis improvement in productivity¹⁴.

As stated before, the share of industrial products in the commodity composition of exports goods increased significantly compared to agricultural products. In 2000, the industrial goods made up 92.9% of total exports¹⁵. The variety of the export goods as well as export markets has been broadened. Iron and steel, motor vehicles, glass and ceramics, electrical appliances,

¹¹ <http://www.turkey-now.org/Default.aspx?mID=5&pgID=50&langid=1>, 2007.

¹² <http://www.state.gov/r/pa/ei/bgn/3432.htm>, 2007.

¹³ <http://www.turkey-now.org/Default.aspx?mID=5&pgID=50&langid=1>, 2007.

¹⁴ <http://www.turkey-now.org/Default.aspx?mID=5&pgID=50&langid=1>, 2007.

¹⁵ OECD, 2007.

petroleum products and spare parts were added to textiles and clothing products which were the main exports goods before.

Domestic trade contributes to the economic growth as well. The private consumption expenditures and consumer loans have increased starting with 2003. The consumer expenditure has increased gradually from USD 159.6 billion in 2003 to USD 274.3 billion (est.) in 2007. The annual disposable income also has increased significantly from USD 159.7 billion in 2003 to USD 278.2 billion (est.) in 2007¹⁶.

The major trade partner of Turkey is the EU, Germany having the biggest share. 51% of Turkey's total exports and 45% of its imports are to/from the EU. The Customs Union, also expanded to the ten new member states through the Ankara Agreement, has enhanced the trade. Other important trading partners are the US, Russia, Middle Eastern countries and Japan.

Foreign direct investment is an important stimulus to industrial growth and development. As a developing country Turkey has not reached its potential for FDI because of political as well as macroeconomic instability, structural barriers and complicated bureaucratic procedures. According to an analysis made by TÜSIAD (Turkish Industrialists' and Businessmen's Association) and YASED (International Investors Association) in 2003, in FDI attractiveness Turkey ranked below India and above Argentina. Due to international standards, the country's FDI attraction should be between Brazil and China, which means that Turkey should have a minimum annual FDI attraction potential of \$35 billion¹⁷.

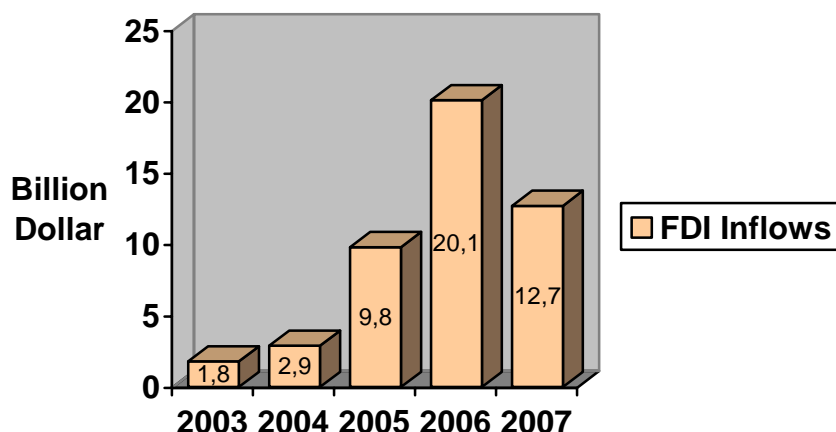
After 2002, a number of legal reforms have been made in order to remove the barriers to FDI and to improve the business environment. The new FDI law of June 2003 includes an equal treatment principle, giving foreign investors the same rights and obligations as domestic investors (TÜSIAD, YASED, 2004).

As a consequence of the improvements, FDI inflows have considerably risen; from \$1.8 billion in 2003 and \$2.9 billion in 2004 to \$9.8 billion and \$20.1 billion in 2005 and 2006, respectively. Nevertheless, Turkey could not reach the targeted FDI inflows. Both in absolute values and in comparison to Central and Eastern European (CEE) countries, FDI inflows to Turkey have been at very low levels.

¹⁶ Euromonitor, Turkey Statistics, <http://www.euromonitor.com/factfile.aspx?country=TR>, 2007.

¹⁷ TÜSIAD, YASED from World's Investment Report of the United Nations Conference on Trade and Development, 2004.

Figure 1: Foreign Direct Investment Inflows to Turkey (2003-2007)



Source: UNCTAD - World Investment Report

Turkey is currently following an IMF program since 2001 which is intended to guarantee repayments, keep the inflation rate under control, prevent devaluation and maintain the solvency of the banking sector. The main pillars of the stand-by arrangement were strong structural reforms and effective fiscal as well as monetary policies under floating exchange rate regime. Structural reforms include the enhancement of the social security system and the achievement of a balance between the system's assets and liabilities. Further reforms were the enlargement of the tax base and the registering of the informal economy. In the agricultural sector, transition to the direct income support system has been started.

Privatization is a crucial part of Turkey's reform agenda as it will help the economy to grow in the competitive environment. Nevertheless, the privatization of state banks and energy companies is a difficult and controversial issue as they are considered to be 'strategically important'.

2.1.2. Sectoral Output, Employment and Productivity

As a consequence of the liberalization efforts after 1980, macroeconomic stabilization and structural reforms after the 2001 crisis, the private business sector has become stronger and more resistant to political instability, big macroeconomic shocks, regulatory and institutional uncertainties, consequent increases in risk premia as well as capital costs¹⁸.

¹⁸ OECD, ECO/WKP(2007)2, 01.24.2007.

The enhanced predictability of the business environment, achieved through market-enhancing structural reforms as well as the credibility of macroeconomic institutions, has resulted in the creation of more new enterprises and the increase in private investment and business sector productivity (see Figure 2-A)¹⁹.

As a consequence of the reforms and the real exchange rate depreciation in the February 2001 economic crisis, the volume of exports jumped. As it can be observed in Figure 2-B, in the period from 2000 to 2005, the export market grew by (cumulatively) 30%.

One of the most important challenges to the business sector was the increased international competition. However, companies were affected to different extents as the intensity of the international competition was varying for different business sectors²⁰.

During the economic developments after 1980, industry has been the ‘winner’ and agriculture the ‘loser’. In 2006, industry made up 25.4% of GNP and was providing 20% of jobs, whereas the share of agriculture was only 10.8% of GNP providing 26% of jobs. Moreover, agriculture has a much smaller percentage in the commodity composition of export goods.

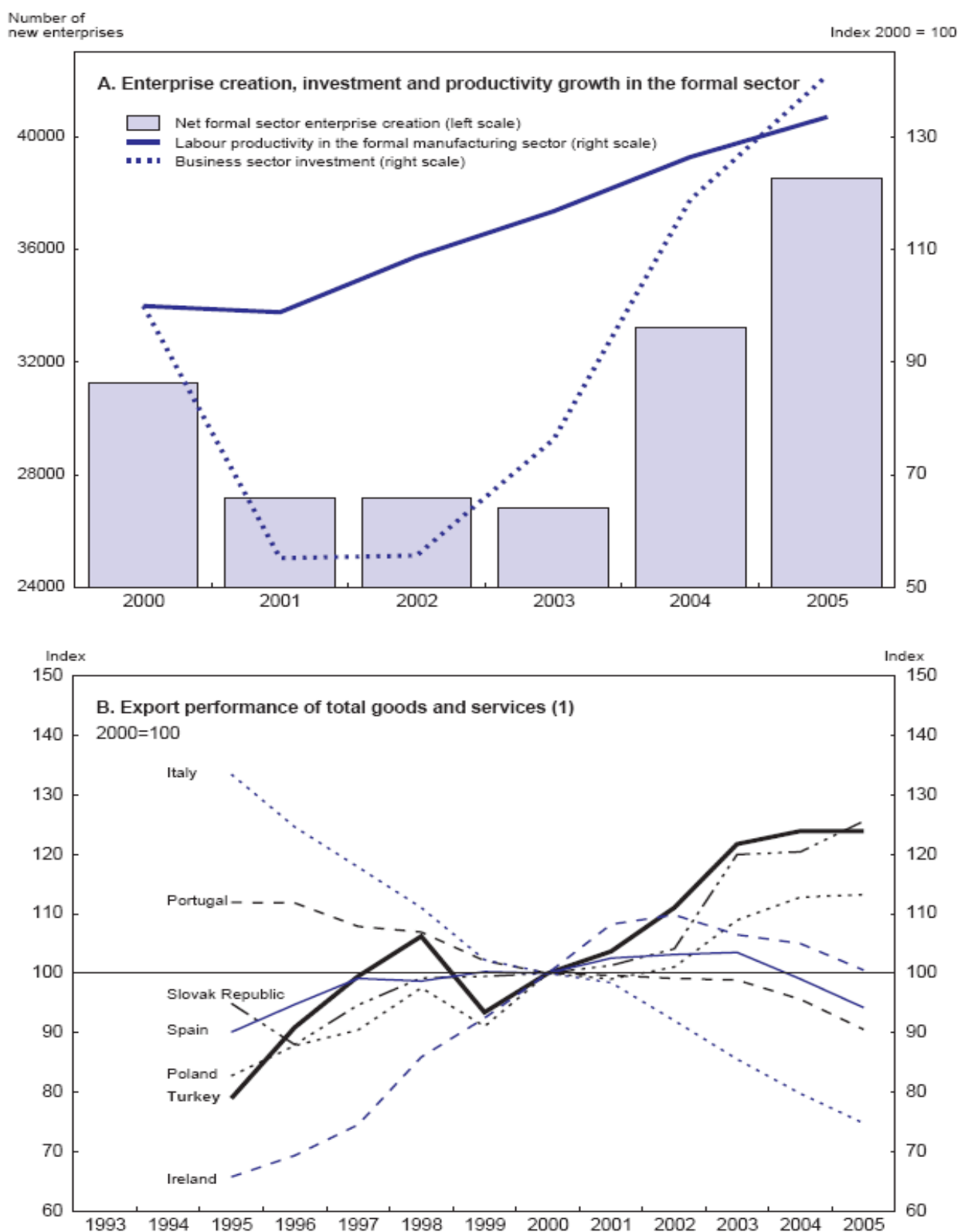
The difference in the business sectors’ exposure to international competition has resulted in different performances. As it can be observed in Figure 3, while from 2000 on, exporting firms had lower profit margins, those with domestic sales made slightly increasing profits. The profits in the sectors depended strongly on exchange rate fluctuations. Furthermore, labor-intensive industries in export markets were affected more by the competition from low-wage countries than those in the domestic market²¹.

¹⁹ OECD, ECO/WKP(2007)2, 01.24.2007.

²⁰ OECD, ECO/WKP(2007)2, 01.24.2007.

²¹ OECD, ECO/WKP(2007)2, 01.24.2007.

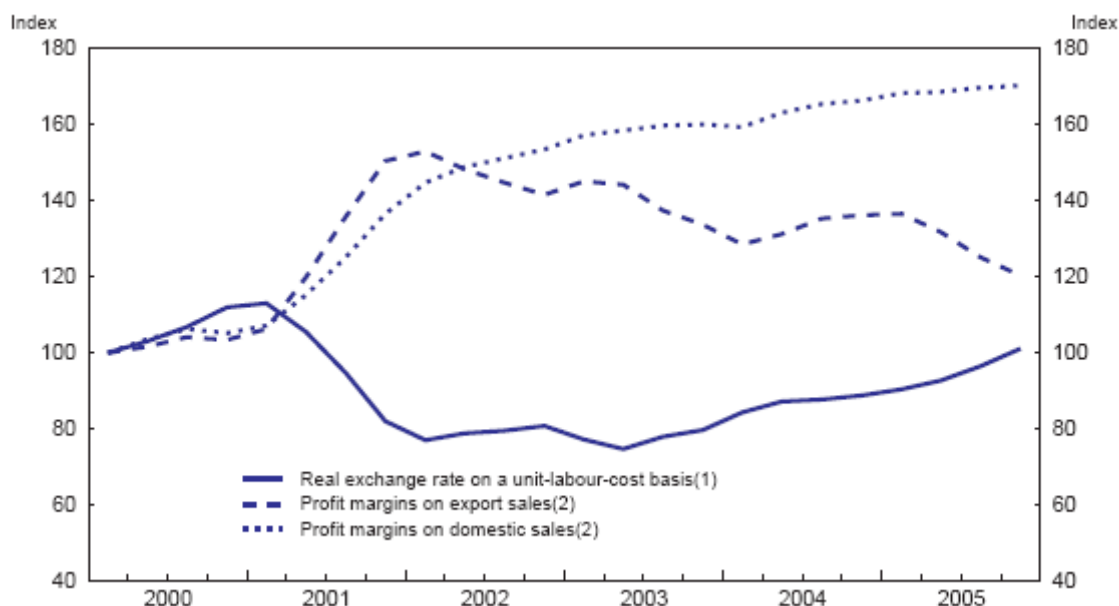
Figure 2: Recent Business Sector Performance



(1) Growth of exports is divided by growth of export markets.

Source: ECO/WKP(2007)2 from TURKSTAT, OECD Analytical Database and Economic Outlook 79.

Figure 3: Real Exchange Rate and Profit Margins in Domestic and Export Markets
(2000 Q1 = 100)



(1) Increase means appreciation.

(2) For the estimation methodology of profit margins, see Annex 1A, ECO/WKP(2007)2.

Source: ECO/WKP(2007)2 from the OECD

Those industries which could not raise their productivity or cut their wages to a necessary extent, could not keep their previous profit margins because of the decrease in the output prices. Only some industries, e.g. those with product specialization, smaller exposure to foreign competition or high demand, had larger profit margins as they felt less pressure on output prices²².

The highly competitive sectors with increased output prices, higher labor productivity growth and a rather low wage growth were the car and electronics industries, whereas the ‘traditional’ textiles and clothing industry was the declining sector with a substantial profit decrease. On the intermediary level were the food and plastics sectors²³.

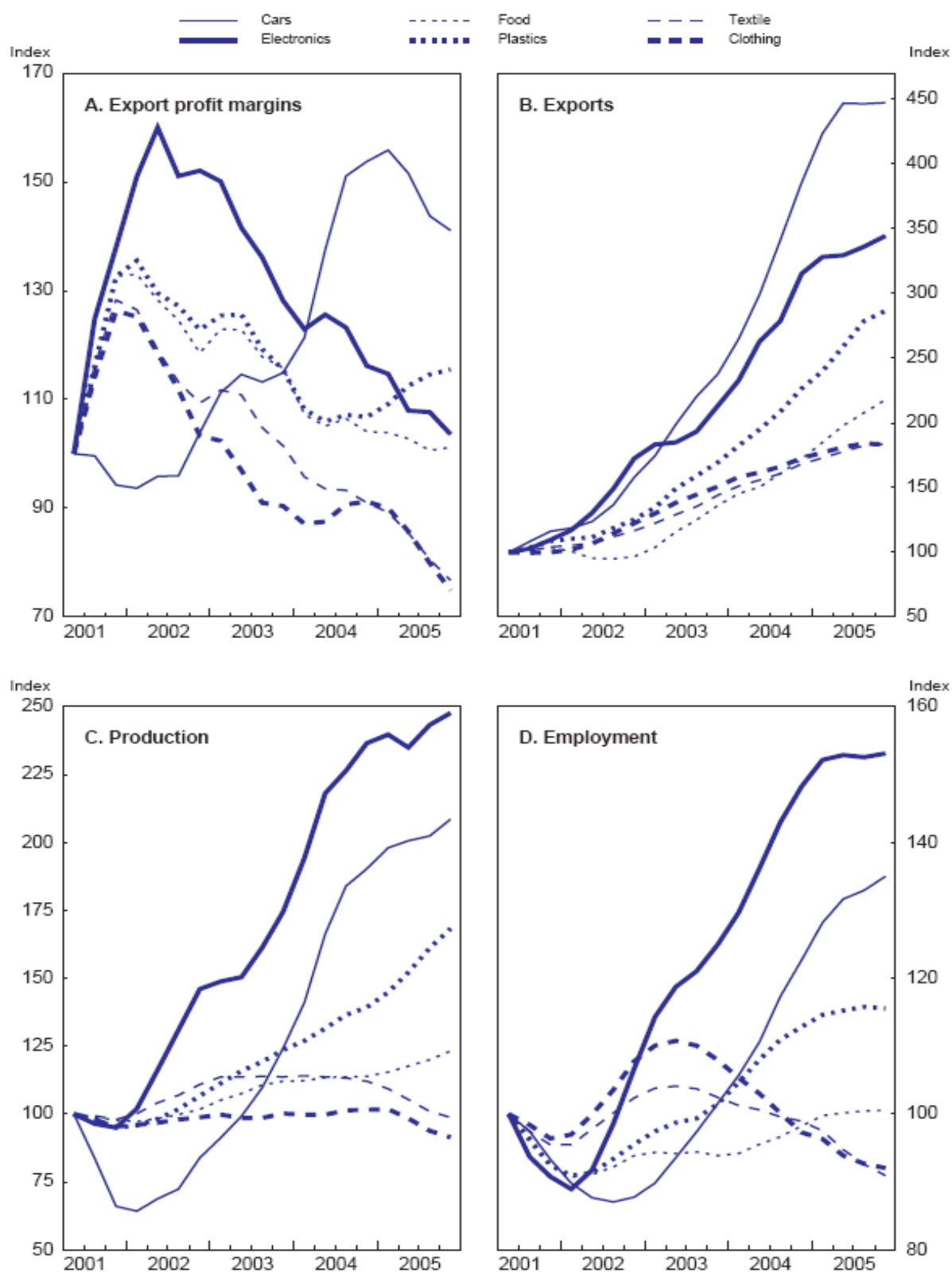
Figure 4 represents the differences in export profit margins, export volume, production and employment rate for the cars, electronics, food, plastics, textile and clothing sectors.

²² OECD, ECO/WKP(2007)2, 01.24.2007.

²³ OECD, ECO/WKP(2007)2, 01.24.2007.

Figure 4: Performance in Some Representative Sectors (2001Q2 = 100)

Highly Competitive Sectors are shown with thick lines, declining sectors with dashed lines and intermediary sectors with dotted lines.

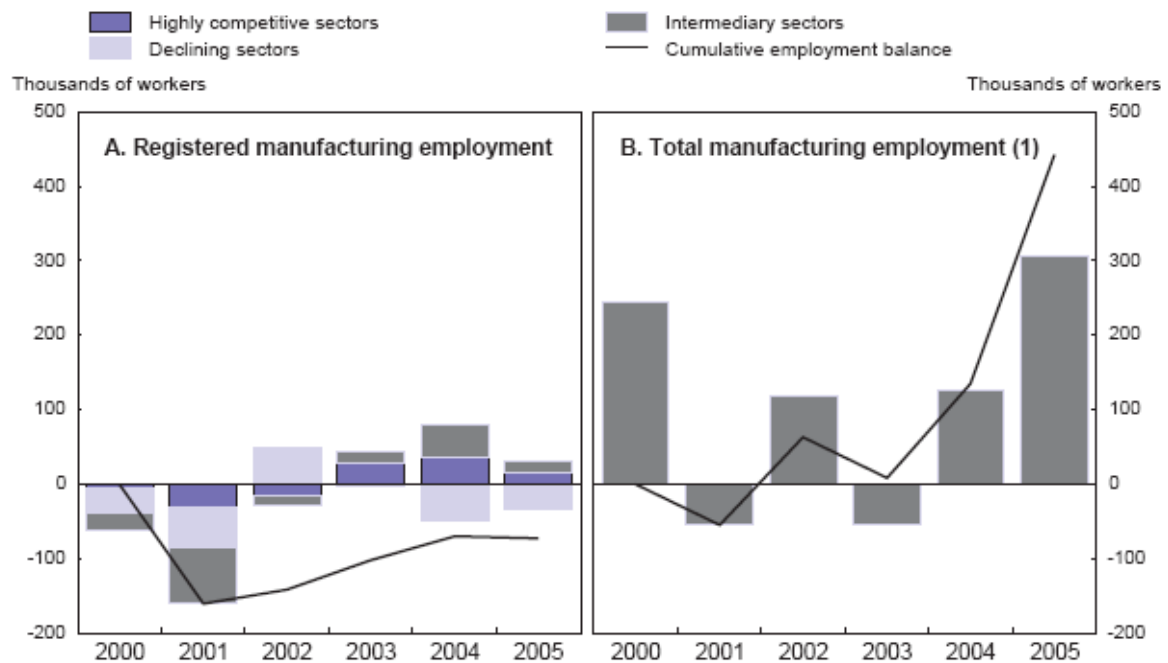


Source: ECO/WKP(2007)2, OECD 2007.

The intermediary sector has the largest share in total employment, which is 50%. The declining sectors are very large compared to the highly competitive sectors. They were composing about 36% of the total manufacturing employment in 2003, whereas the share of the highly competitive sectors was only 13%. Job creation by the highly competitive and intermediary sectors was not sufficient to employ the labor force previously working in the declining sectors, particularly in agriculture, and the large number of new entrants²⁴.

The figure below illustrates the registered manufacturing employment, cumulatively as well as by performance groups of sectors, and the total manufacturing employment in the five-year period between 2000 and 2005.

Figure 5: Employment Shifts from Declining to Growing Manufacturing Sectors



Source: ECO/WKP(2007)2 from *Manufacturing Output and Employment and Quarterly Labor Force Surveys*, TURKSTAT.

2.1.3. Real Exchange Rate Changes

The trade weighted real exchange rate is a widely used measure of a country's international competitiveness. Real exchange rate and real exchange rate volatility may have a major negative impact on real exports, as it is in case of Turkey. Volatility affects the trade flow negatively by increasing uncertainty and risk²⁵. Empirical evidence shows that there is a

²⁴ OECD, ECO/WKP(2007)2, 01.24.2007.

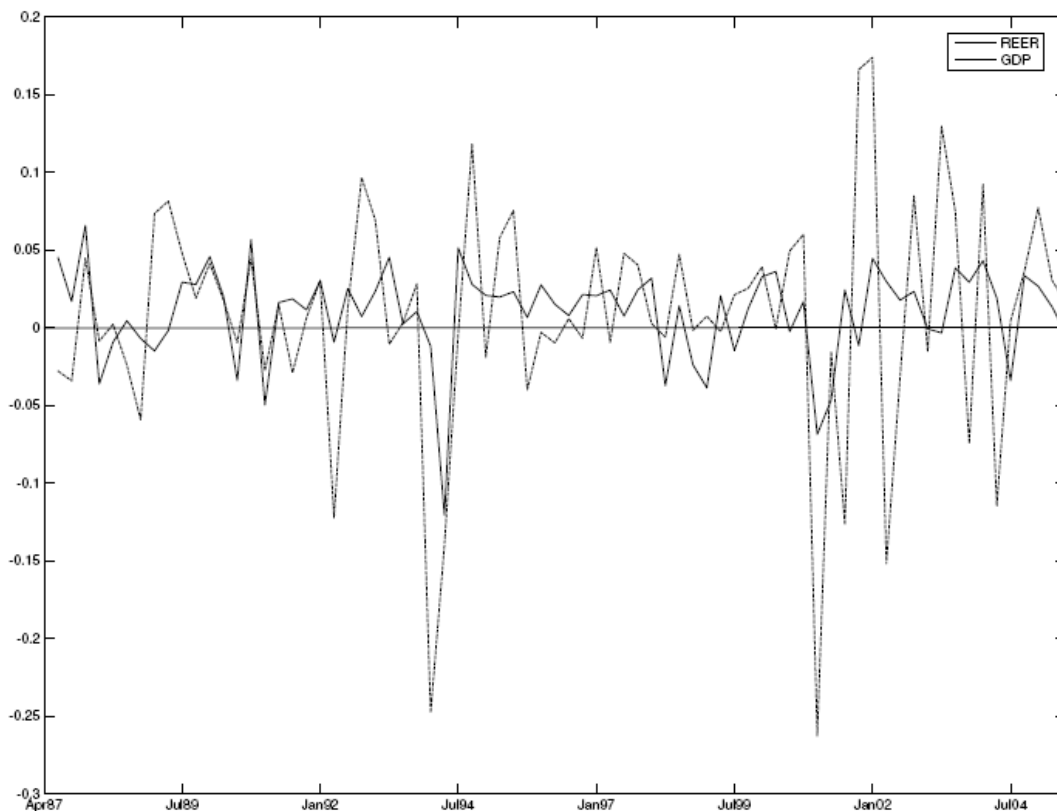
²⁵ Vergil, 'Exchange Rate Volatility in Turkey and its Effects on Trade Flows', 2002, *Journal of Economic and Social Research*, Vol.4 No.1., pp.67-80.

negative relation between the real exports of Turkey to the United States and its two most important European trading partners, Germany and France, on the one hand, and real exchange rate and real exchange rate volatility, on the other²⁶.

Following both the economic crisis of 1994 as well as the twin crises of 2000-2001, the Turkish lira was devalued. Consequently, there was a contraction in the output and an improvement in the trade balance. While the GDP grew by almost -6% in 1994 and by -8% in 2001, the trade balance jumped from -8.6% in 1993 to 0.05% in 1994, and from -7% in 2000 to 2% in 2001²⁷.

Starting with February 2001, the floating exchange rate regime has been in use. Figure 6 illustrates the changes in the real effective exchange rate (REER) and the real GDP for the period between the 1st quarter of 1987 and 3rd quarter of 2005. It can be observed that before the economic crises there was a real appreciation and afterwards a deep depreciation (by 40%).

Figure 6: Natural log of Real Effective Exchange Rate



Source: Ardic, 2006.

²⁶ Vergil, 'Exchange Rate Volatility in Turkey and its Effects on Trade Flows', 2002, Journal of Economic and Social Research, Vol.4 No.1., pp.67-80.

²⁷ Ardic, 'Output, the Real Exchange Rate and the Crises in Turkey', 2006, Topics in Middle Eastern and North African Economies, MEEA Online Journal 8 (2006).

The relation between the exchange rate, output and trade balance implies that the trade balance changes as a response to the income effect. When income is reduced, imports decrease as well. The output contraction following the devaluation can possibly be the consequence of the common use of imported intermediate inputs for production which (through the devaluation) have become more expensive²⁸.

2.2. An International Comparison of Turkey's Trade Competitiveness in the Manufacturing Sector

The main purpose of this section is to examine the structure of specialization of Turkey in the manufacturing sector and its international trade competitiveness in comparison with the EU. Special attention will be paid to five of the new EU member states – Bulgaria, the Czech Republic, Hungary, Rumania and Poland by examining Turkey's capability to cope with the increased competition from the enlarged Union.

Empirical research indicates that all five new EU member states as well as Turkey have a comparative advantage at exporting labor-intensive goods. While all countries of comparison have also a comparative advantage at the export of raw material-intensive goods, Hungary only has an advantage in selling easily imitable research-oriented goods. Research results show further that Turkey has a comparative disadvantage at imitable research-oriented goods, thus the same export structure as Romania, Poland and to some extent, Bulgaria²⁹.

The Customs Union Agreement concluded between Turkey and the EU in 1995, which covers merely the trade of manufactured goods, has had an important (positive) effect on Turkey's foreign trade performance. The structure of the foreign trade started to gradually shift from mainly low-skill sectors such as agriculture, textile and clothing (with low income elasticity) to high-skill sectors. International competitiveness is dependant on cheap labor force and the performance at high-skill, high value-added and capital-intensive sectors.

The international competitiveness of Turkey's machinery and transport equipment sectors rose, however the textile and clothing industry as well as agriculture were the losing sectors. Although there was no significant improvement in the value added in most traditional sectors apart from the automotive industry, they still kept their shares as the structure of foreign trade

²⁸ Ardic, 'Output, the Real Exchange Rate and the Crises in Turkey', 2006, Topics in Middle Eastern and North African Economies, MEEA Online Journal 8 (2006).

²⁹ Yilmaz, 'Turkey's Competitiveness in the European Union: A Comparison with Five Candidate Countries – Bulgaria, the Czech Republic, Hungary, Poland, Romania – and the EU15', February 2003, Ezoneplus Working Paper No.12.

can change more quickly than that of the industry³⁰. The sectoral foreign trade performance will be dealt with in the next section.

Since 2001, the major challenges to the business sector have been real currency appreciation on the one hand, and competition from low-cost countries on the other. The real exchange rate, which was dealt with in the previous section, has appreciated against the average rate of trading partners by 2.5% and 14.5% in 2004 and 2005, respectively, weakening the competitiveness of the firms considerably³¹. In 2006, however, it has depreciated again falling back to the level before the appreciations.

The other important issue was increased competition from countries such as China and India. Labor-intensive sectors, particularly the textiles, clothing and leather industries were affected heavily. These were the ‘traditional’ sectors of the country constituting approximately one third of the manufacturing exports and of the employment.

The effects of the rising international competitiveness can be observed in Turkey’s trade performance. The export market gains have fallen after 2003, while the volume of imports has risen, thereby increasing the trade deficit. Import competition has had an effect on particularly domestic producers of several consumer products and industrial inputs. Thus, between 2001 and 2005, the share of imported goods in private consumption has increased from 5.5% to 8.5%³².

The years 2004 and 2005 were difficult for the business sector because of the real effective exchange rate appreciation. Nevertheless, looking at the period 2000-2006, the real wage reductions and depreciation of 2000 and 2001 counterbalanced Turkey’s weak performance in 2004 and 2005. According to the standard OECD indicator of competitiveness, Turkey had the largest fluctuations in competitiveness among all OECD countries in the last decade³³.

2.3. Sectoral Aspects of Turkey’s Competitiveness and Sectoral Performance

Figure 7 demonstrates the developments in the sectoral share of Turkey’s exports to the EU. Exports of manufactures mainly consist of textile and clothing, machinery and transport equipment, food and live animals as well as iron and steel. As the export goods composition includes by and large semi-processed primary goods, there is further the need to change the

³⁰ Savas, ‘The Effects of the Customs Union on Turkish Foreign Trade and Industry’, <http://www.dtm.gov.tr/dtmweb/index.cfm?action=detayrk&yayinID=1662&icerikID=1797&dil=TR>, 2002.

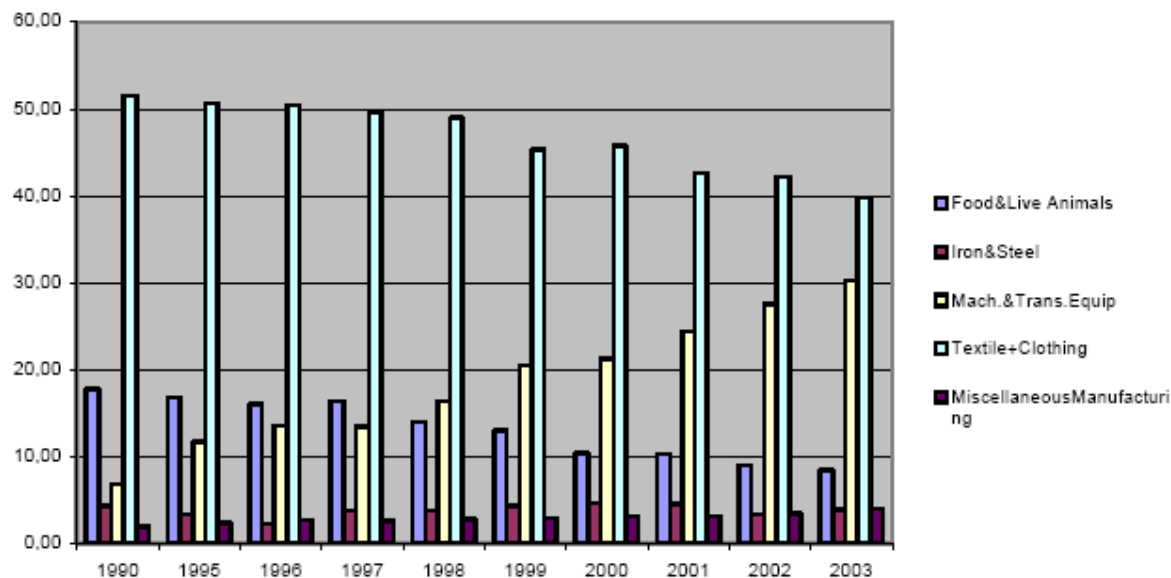
³¹ OECD, ECO/WKP(2007)2, 01.24.2007.

³² OECD, ECO/WKP(2007)2, 01.24.2007.

³³ OECD, ECO/WKP(2007)2, 01.24.2007.

foreign trade structure from low-technology towards technology-intensive products in order to increase Turkey's international competitiveness³⁴.

Figure 7: The Sectoral Share of Turkish Exports to the EU



Source: Seymen, Utkulu, 2004, from SPO, SIS.

It can be observed that after the Customs Union Agreement (between 1996 and 2003), Turkey's machinery and transport equipment exports to the EU increased by 124.4%, whereas the textiles and clothing exports decreased by 21%. Thereby the share of machinery and transport equipment changed from 13.5% in 1996 to 30.3% in 2003, while the one of textile and clothing fell from 50.4% in 1996 to 39.8% in 2003³⁵.

Agriculture has a special importance for Turkey's integration to the EU concerning the future development of the Customs Union as well as its full membership prospect. Agriculture, although not having a big share in the country's GDP (it makes up approximately 11%), accounts for a large part of total employment. Thus, changes in this sector would have considerable impacts on other sectors and on the Turkish economy.

The Turkish agricultural sector has also significance for the EU because its potential can affect the EU agricultural market. Therefore, agriculture was left out from the Customs Union Agreement between Turkey and the Union. On the other hand, in case of including

³⁴ Seymen, Utkulu, 'Revealed Comparative Advantage and Competitiveness: Evidence for Turkey vis-a-vis the EU/15', 2004.

³⁵ Seymen, Utkulu, 'Revealed Comparative Advantage and Competitiveness: Evidence for Turkey vis-a-vis the EU/15', 2004.

agricultural provisions to the CU, Turkey would most likely import several products, e.g. processed dairy products, from the EU because of the lower prices in the Union³⁶.

If Turkey becomes a member of the Union, the Common Agricultural Policy (CAP) will have to be revised. According to the current CAP, Turkey's membership would mean a large budgetary expansion. Nonetheless, the amount of eventual financial net transfers from the EU to Turkey in the framework of the CAP is unclear. Direct payments to Turkish producers would rather be low but payments under the second pillar would be of meaning, if they were allocated due to the need for rural development measures³⁷.

Between the agricultural sector of Turkey and the EU, considerable differences exist. Table 1 gives an overview of the agricultural production, GDP, employment and trade of the two parties. The total production in the EU15 was about ten times larger than in Turkey. Nevertheless, the importance of the sector is much more in Turkey than in the EU. Agricultural GDP and employment have a far bigger share in the total values in Turkey than in the EU. While the EU is a net importer of agricultural products, Turkey is a net exporter. However, agricultural imports and exports have a higher percentage in agricultural production in the EU than in Turkey. Furthermore, the product composition is different in the two parties.

Table 1: Overview of Agricultural Sectors in Turkey and the EU (in bill. €)

	EU(15)	Turkey
Value of the agricultural production (EU 2001, Turkey 2001-02)	287.9	25.6
Of which plant production (%)	58.1%	72.0%
Of which animal production (%)	41.9%	28.0%
Agricultural GDP (EU 2001, Turkey 2002-03)	151.4	23.9
Percentage of total GDP	1.7%	11.2%
Agricultural Employment (% of total) (EU 2001, Turkey 2002-03)	4.2%	34.4%
Agricultural Imports (2001-02)	60.7	3.0
Percentage of agricultural production	21.1%	11.7%
Agricultural Exports (2001-02)	56.5	4.1
Percentage of agricultural production	19.6%	16.0%
Net agricultural trade (2001-02)	-4.2	1.1

Source: Grethe (2003) in 'Turkey and the EU Enlargement' (2004), from Food and Agriculture Organization of the UN (FAO) (2004), Commission of the European Communities

³⁶ Grethe, 'The Integration of Agricultural Markets from a Turkish Perspective', 2004.

³⁷ Grethe, 'The Integration of Agricultural Markets from a Turkish Perspective', 2004.

(2004), *State Institute of Statistics (SIS) (2004a, 2004b), SIS (various issues): Agricultural Structure, OECD (2003a), calculations by Grethe.*

2.4. Assessments

Turkey's vulnerabilities can be observed in its fundamentals, unfavorable investor base and positioning and high susceptibility to changes in global market sentiment. Its large current account deficit, real currency overvaluation and high credit growth make the country more vulnerable to market sentiments than other emerging economies. While Turkey has been one of the most attractive markets in the region and foreign investors have rebuilt positions in the domestic bond and money markets, most investment inflows have been in form of 'hot' money with a short-term focus rather than 'real' money with medium-term focus. The high public debt and dollarization are further factors leaving Turkey at risk.

The private business sector has become stronger. Enhanced predictability of the business environment has led to the creation of new enterprises and increase in private investment as well as in productivity. Increased international competition and real currency appreciation, however, have become the most important challenges leading to different performances in various sectors. After 2000, exporting firms had lower profit margins, but those with domestic sales increasing profits, which strongly depended on exchange rate fluctuations.

In general, industry has been the 'winner' and agriculture the 'loser'. The 'intermediary sector' has the largest share in total employment (50%). Nevertheless, job creation by the highly competitive and intermediary sectors was not sufficient to employ the working age population – the new entrants and those who were previously employed in declining sectors such as agriculture.

In addition, traditional sectors (other than the automotive industry) kept their shares although the value added in them was not increased much. In order to increase Turkey's international competitiveness, it is needed to change the foreign trade structure from low-technology products towards technology-intensive value-added goods. Furthermore, essential reforms in the agricultural sector are crucial since it still provides a high percentage of employment but makes a very small contribution to GDP.

3. TURKEY'S MACROECONOMIC POLICIES

3.1. Fiscal Policy and Government Debt

Tight fiscal policy has been in the center of Turkey's macroeconomic policies. Growth has been supported by primary surpluses, which on average were 6.7% of GNP from 2002 on, through the reduction in debt ratios, lower interest rates and risk premiums³⁸. Nevertheless, the fiscal adjustment based mainly on tax increases and investment cuts instead of on rationalization of current expenditure. Although the tax base was broadened and (income) tax distortions were reduced to a certain extent, measures had also to be taken in form of investment cuts and higher taxes.

Indicators of public indebtedness are illustrated in the table below.

³⁸ IMF Country Report No. 07/362, Nov. 2007.

Table 2: Public and External Debts and Macroeconomic Indicators

	1998	1999	2000	2001	2002	2003	2004	2005
Public Debt								
Gross Treasury Debt/GNP	40.6	53.1	50.6	100.8	88.2	79.3	73.8	68.2
YTL Denominated Domestic Debt / Gross Treasury Debt	49.8	52.4	52.6	44.2	41.9	53.7	58.5	62.4
Floating Rate YTL Debt / Gross Treasury Debt	32.8	38.2	32.1	10.0	15.5	24.3	30.0	30.6
Fixed Rate YTL Debt / Gross Treasury Debt	17.0	14.2	20.4	34.3	26.4	29.4	28.5	31.8
FX Denominated or Indexed Debt / Gross Treasury Debt	50.2	47.6	47.4	55.8	58.1	46.3	41.5	37.6
FX Denominated or Indexed Domestic Debt / Gross Treasury Debt	3.6	2.7	4.7	24.4	19.9	15.1	12.5	11.4
Fixed Rate External Debt / Gross Treasury Debt	37.4	36.1	33.6	24.4	22.5	18.8	17.3	16.6
Floating Rate External Debt / Gross Treasury Debt	9.2	8.8	9.2	7.0	15.7	12.5	11.8	9.6
Net Public Sector Debt / GNP			57.1	90.4	78.4	70.3	63.4	55.3
Net Public Sector Debt / Central Government Revenue			212.4	308.9	282.2	250.2	245.5	199.6
Net Public Sector Debt / General Government Revenue					194.7	171.4	151.5	127.6
Treasury Debt Servicing / GNP	11.5	13.7	16.3	23.3	18.9	16.4	13.2	9.4
Treasury Debt Servicing / Central Gov. Revenue	52.0	56.5	60.6	79.3	67.9	58.5	5.0	33.9
Average Maturity of Domestic Debt Instruments (in months)	13.4	16.3	15.5	38.5	32.1	251.1	20.6	23.5
External Debt								
Public Sector External Debt / GNP	19.2	23.0	24.3	31.6	35.2	29.0	24.6	18.9
Treasury's External Debt / GNP	15.7	18.7	19.7	26.6	31.4	26.5	22.9	17.9
CBRT External Debt / GNP	6.3	5.9	7.0	16.7	12.2	102.2	7.1	4.3
Private Sector External Debt / GNP	21.1	26.8	27.9	29.6	24.6	21.4	22.4	24.1
Total External Debt / GNP	46.6	55.7	49.3	77.9	72.0	60.6	54.2	47.3
Short-term External Debt / GNP	10.1	12.4	14.2	11.3	9.1	9.6	10.9	10.6
External Debt / Exports of Goods and Services	178.8	228.1	236.2	229.1	240.4	209.7	180.3	166.0
External Debt / Reserves	488.1	444.9	534.5	604.8	485.6	431.4	450.6	337.7
Macroeconomic Indicators								
Central Bank Reserves / GDP	9.8	12.7	11.2	12.8	14.7	13.8	12.0	14.0
Nominal T-bill Rate	122.5	109.5	38.0	96.2	63.8	45.0	25.7	16.9
Ex-post Real Rate (GNP Deflator)	26.9	34.5	-8.5	26.3	13.4	18.4	14.8	6.4
EMBI+ spread in Basis Points		514.9	487.3	889.5	262.5	629.5	354.2	270.8

Source: Central Bank of Turkey, 2007.

3.2. Monetary Policy

The economic and monetary integration to the European Union includes three phases. The first phase is the candidacy period where each candidate country may choose its monetary and exchange rate policy. The second phase is the accession phase which starts with EU membership. In the last phase, member states are expected to join the EMU and adopt the euro. In this section, it is aimed to look at Turkey's monetary policy during the first phase, which is the candidacy period.

In the aftermath of the 2000-2001 crises, the banking sector, which will be dealt with in the following part, was in need of a substantial reform. The public debt to GDP ratio had increased by 100.8%. In May 2001, a new economic program backed by the IMF was adopted where monetary policy was being conducted under fiscal dominance. Since Turkey has had a vulnerable economy with accumulated problems in the previous decades, challenges to the monetary policy do not have their roots solely on the EU accession process, but also on the fiscal dominance and the necessary transition to monetary dominance³⁹.

One of the challenges faced since 2001 was to increase the grade of monetary policy versus that of fiscal policy. As a predecessor of formal inflation targeting, informal inflation targeting was carried out between 2002 and 2006. Indicating a transition towards a dominant monetary policy, the Central Bank of Turkey (CBT) has adopted formal inflation targeting in January 2006.

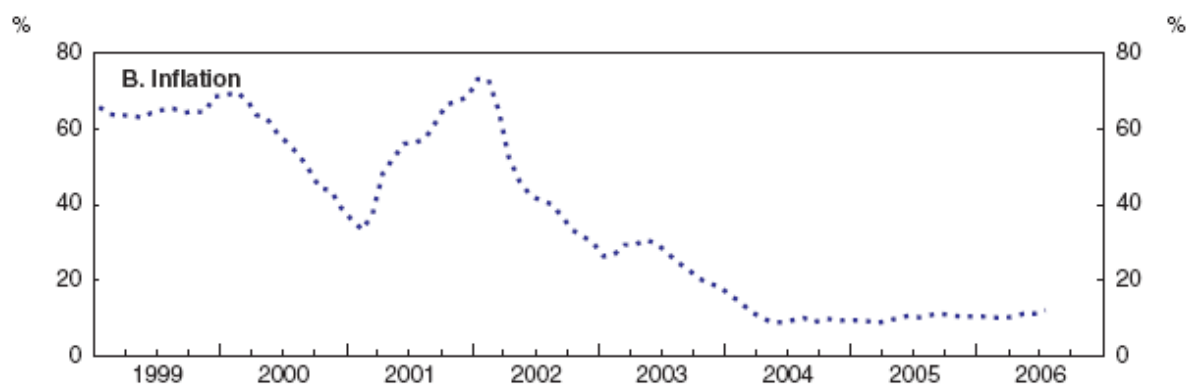
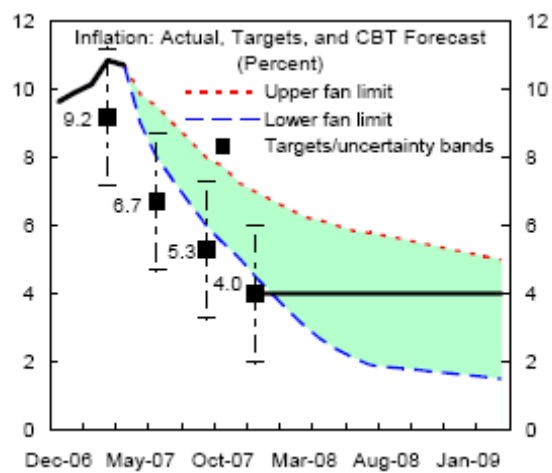
Based on the annual percentage change of the Consumer Price Index (CPI), the central bank announces a three-year target path for inflation on a rolling basis. Inflation targets for 2006, 2007 and 2008 were 5%, 4% and 4%, respectively, with an uncertainty band of 2% that can be narrowed by the central bank in case of price stability⁴⁰. The inflation target for 2006 could not be reached due to several reasons such as supply-side (oil and food price) shocks and a slide in the lira. Nevertheless, the medium-term inflation target is kept at 4%. While the 2007 target of 4% was exceeded, it is expected that the actual rate will converge to the target in 2008.

³⁹ Özatay, 'Monetary Policy Challenges for Turkey in European Union Accession Process', 2005, CBT Research Department Working Paper No.05/11.

⁴⁰ IMF Country Report No. 07/161, May 2007.

Figure 8: Inflation – Actual, Targets and CBT Forecast (December 2006- January 2009) and Development in the Period 1999-2006

A.



Sources: IMF Country Report No. 07/362,

OECD Economic Surveys: Turkey, OECD 2006.

In recent years, reverse dollarization and surge in capital inflows have been the main sources of concern as they put pressure on the Turkish lira to appreciate. The Turkish economy is defined as a highly dollarized economy according to the classification by Reinhardt et al. (2003). From the 1960s on, the inflation rate had been in a mounting trend and in 1980, the rate had reached 108%. It was taken under control with a stabilization and structural adjustment program adopted in 1980. In 1984, it has been allowed to Turkish residents to hold their bank deposits in foreign currency as part of the financial liberalization process and because of the high inflation rate. Five years later, the capital account liberalization was concluded. Nevertheless, after 1995, the inflation rate went up to about 80%⁴¹.

The high inflation level and ineffective policies together with political developments lead to dollarization during the 1980s and 1990s. With the inflation rate taken under control after 2003, prudent policies and continuing structural reform process, a moderate reduction in the dollarization effect has been observed. In addition to the Turkey's EU prospect, the fact that economic agents increasingly hold Turkish-lira denominated financial assets contribute to the de-dollarization process.

While Turkey could attract far less FDI compared to CEE countries, it has been a large recipient of other capital inflows. Following the redenomination of the lira, multilateral institutions as well as international banks and export credit agencies have begun to issue lira denominated bonds which has increased the demand for longer maturity Turkish Treasury bonds and the capital inflows⁴².

Increasing foreign exchange supply through reception of capital inflows and de-dollarization can have a positive effect on the disinflation process (through appreciation pressure on the domestic currency). Through formal inflation targeting, the CBT has a better opportunity to cut interest rates, a policy that was used by the Czech Republic, Hungary, Slovakia and Romania in their accession period. Another response can be international reserve accumulation⁴³.

There is further the need to change the structure of the balance sheet of the CBT. The share of foreign currency liabilities in total liabilities of the CBT is very high. It accounted for 67% in 2004 and was decreased to 46.76% in November 2007⁴⁴.

⁴¹ Özatay, 'Monetary Policy Challenges for Turkey in European Union Accession Process', 2005, CBT Research Department Working Paper No.05/11.

⁴² Özatay, 'Monetary Policy Challenges for Turkey in European Union Accession Process', 2005, CBT Research Department Working Paper No.05/11.

⁴³ Özatay, 'Monetary Policy Challenges for Turkey in European Union Accession Process', 2005, CBT Research Department Working Paper No.05/11.

⁴⁴ CBT Weekly Statement, 16.11.2007.

Another challenge to monetary policy concerns the CBT law, where the central bank and the government share the responsibility of setting the framework (inflation targeting) and the targets of monetary policy (inflation targets). A number of articles need be amended to comply with the Treaty and Statute of the European System of Central Banks (ESCB). An example for this would be Article 4 II b of CBT law, stating that the CBT is ‘to determine the inflation target together with the Government’, which is criticized for lacking goal independence⁴⁵.

Box 1: Requirements for Inflation Targeting and Their Status in Turkey

Institutional Requirements	Rationale	Status in Turkey	Comment
Central Bank Independence	The central bank needs a free hand to attain its inflation objective	Yes	The CBT has full instrumental independence. The CBT and government share the responsibility of setting the MP framework and inflation target but the CBT decides ultimately on the implementing strategy.
Effective Monetary Policy Instrument	The central bank should have a major instrument that can inform markets about its stance in monetary policy and that can influence expectations of inflation	Yes	
Accountability	Clarity is required about the responsibilities of the central bank in achieving stated price stability objectives	Compliance in progress	After CBT Law amendments in 2001, most IMF requirements of good transparency practices for monetary policy are met.
Disclosure	Central bank ought to communicate clearly and frequently with government, market and public	Yes	Periodic publications (Bimonthly ‘Survey of Expectations’ among analysts from financial and corporate sectors covering end-of-month and end-of-year expectations, Monthly ‘Inflation and Outlook’ reports, Analytical Balance Sheet (CBT), etc.) Public hearings
Exchange Rate Regime	Flexibility of exchange rate is required so the domestic	Yes	Floating exchange rate regime with an uncertainty band of +/-2% (small flexibility)

⁴⁵ Özatay, ‘Monetary Policy Challenges for Turkey in European Union Accession Process’, 2005, CBT Research Department Working Paper No.05/11.

	monetary policy determines monetary conditions		
Responsibility	Inflation targets must be announced by government as an agreed to objective that is to be met by the central bank	Yes	A three-year path for inflation targets is announced (2006-2007-2008)
Harmony with the Fiscal Policy	Fiscal policies need to be compatible with inflation targeting	Compliance in progress	Monetary policy was being conducted under fiscal dominance but currently there is a transition towards a dominant monetary policy
Public Support	The public should consider the adopted strategy as the most appropriate one under the circumstances	Yes (?)	Public does not seem to be adequately informed.
Well Developed Financial System	Financial markets should generate strong preference for price stability	Compliance in progress	The financial system is developing. After the 2000/2001 banking crises, banks underwent major changes. Their ownership structure changed substantially.

Source: List of requirements and rationales from Horvath (2002) in Felderer et al. (2002)

3.3. Banking and Exchange Rate Policy

In developing countries, the banking sector constitutes the major part of the finance sector. Therefore, the well-functioning of the banking sector is essential for a healthy financial sector as well as to avoid crises and assure stable growth. This section aims at firstly reviewing the developments in Turkish banking sector since the financial and current account liberalization and secondly examining the exchange rate policy.

3.3.1. Developments in and Challenges to the Turkish Banking Sector

Effective regulation is of essential importance in transitional financial systems, where market liberalization takes place without an effective legal and institutional infrastructure. Such systems to be observed in emerging market economies, such as in Turkey, portray a fundamental asymmetry. While under normal conditions the banking sector is likely to make a rather narrow impact, a financial crisis caused by bank failures may have an overwhelming

negative effect on the real economic development⁴⁶. Thus, for crisis avoidance as well as for assurance of long-term growth, the existence of a strong and healthy regulatory framework in transitional financial systems is crucial.

Starting in January 1980, Turkey has been liberalizing its financial sector including interest rate deregulation. Capital account liberalization was concluded by 1989, when the Turkish lira became fully convertible. However, neither the liberalization of the financial sector nor the capital account liberalization could create a financial deepening or assure a sustained growth. The 2000-2001 crises have shown the link between an under-regulated and poorly functioning banking sector and vulnerability to financial crises. There is a correspondence between budget deficits, government ownership in the banking sector and the inability to provide a proper regulation of the system.

Developments in the Turkish banking sector in the 1990s and early 2000 indicate that the excessive involvement of political authorities in the banking sector regulation, the absence of an independent regulatory institution and the lack of incentives by banks to rehabilitate themselves cause inefficiencies. Banking sector distortions and macroeconomic instability build a vicious circle.

Before privatization, the proportion of public banks compared to private banks was significantly high. Table 3 illustrates the share of banks in the banking sector for the periods 1990-1994 and 1995-2001. Public banks, whose borrowing as well as lending procedure was politicized (e.g. direct lending to certain sectors at subsidized rates), lead to distortions in the sector especially after the 1994 financial crisis. Moreover, ‘duty losses’, losses incurred by state banks through directed lending, were recognized as obligatory by the Treasury. However, the impediment by the Treasury to fulfill its obligations caused the banks to borrow large sums of money generating a distortion in the system through artificially high interest rates on deposits and interbank borrowing⁴⁷.

⁴⁶ Alper, Önis, ‘The Turkish Banking System, Financial Crises and the IMF in the Age of Capital Account Liberalization: A Political Economy Perspective’, 2003.

⁴⁷ Alper, Önis, ‘The Turkish Banking System, Financial Crises and the IMF in the Age of Capital Account Liberalization: A Political Economy Perspective’, 2003.

Table 3: The Share of the Public, Private and Foreign Banks in the Turkish Banking Sector

	Assets / Total Assets	Deposits / Total Deposits	Interest Payments on Deposits / Total Deposits
1990 -1994			
Public Banks	41.4	46.4	23.6
Private Banks	47.4	51.7	17.8
Foreign Banks	3.3	1.9	17.6
1995 - 2001			
Public Banks	35.3	40.1	34.7
Private Banks	52.4	52.5	16.4
Foreign Banks	4.1	2.8	18.2

Source: *Banks Association of Turkey*

The two biggest public banks in Turkey, Ziraat Bank (State Agricultural Bank) and Halk Bank (People's Bank) had an immense political importance. In principle, they were the two main sources of rent distribution and were used by several governments to fulfill interests of electorates. In the period after the 1994 crisis and the subsequent IMF program, they were taken under control.

In the 1990s, private banks were affected by macroeconomic instability. They were trying to gain from float income and arbitrage opportunities. The existence of the so-called 'open-positions' meaning the borrowing of foreign currencies at high interest rates and capitalizing on the opportunities of having Lira denominated government securities made private banks highly vulnerable to speculations. Thus, a number of them failed in the aftermath of the 1994 crisis as well as in 2000-2001.

The entry of new private banks according to political criteria was another problematic situation. In the 1990s, governments under the influence of political considerations have issued licenses to certain private banks, which have failed right after the economic crises.

Although under normal circumstances the presence of foreign banks plays a role in the increase of efficiency and the development of financial markets, in the example of Turkey, foreign banks were a few in number and surprisingly counterproductive. In general, they were not different from the domestic private banks in sharing profits resulting from market imperfections⁴⁸.

While in the 1980s and 1990s Turkish governments were insufficient in regulating the banking sector, the IMF and the World Bank were the main external forces responsible for the implementation of banking sector reforms. Although the European Union also played a role in

⁴⁸ Alper, Önis, 'The Turkish Banking System, Financial Crises and the IMF in the Age of Capital Account Liberalization: A Political Economy Perspective', 2003.

the reform process by way of the Copenhagen Criteria, the function of the two previous institutions was more important.

After the bank failures in 1982 as well as in the aftermath of the 1994 financial crisis, although the legal basis of regulatory reforms was set, the IMF and the World Bank lacked the autonomy and power to push these reforms. An example supporting this fact is the inability to establish an independent supervisory agency in early stages of reform.

The influence of the IMF grew in 1999 when the government as well as the public realized an imminent financial crisis. Consequently, the Banking Regulation and Supervision Agency (BRSA) was founded. The establishment of the independent supervisory agency on the one hand removed the conflicts due to the double functioning of the Treasury, and on the other, reduced the political influence and, to a lesser degree, the power exercised by banking lobbies on the regulation process⁴⁹.

Nevertheless, in the period following the 2001 crisis, the involvement of the IMF in banking regulation (also in the determination of the board members of the BRSA) put its legitimacy publicly into question. It has been criticized, like in many other developing countries, of not having chosen the right order of regulatory reforms in the 1999 program which could have prevented the 2000 and 2001 twin crises.

In May 2001, the 'Banking Sector Restructuring Program' was announced by the BRSA, which includes the restructuring of state banks, prompt resolution of the SDIF (Saving Deposit Insurance Fund) banks, strengthening of private banks and of the regulatory and supervisory framework. The fiscal cost of the restructuring of the banking sector was \$22 billion and \$17 billion for public and private banks, respectively. In sum, the taking-over of banks by the SDIF accounted for about 27% of GDP⁵⁰.

Current major challenges to the Turkish banking system are structural weaknesses and still existing political pressures on the Banking Regulation and Supervision Agency. The share of public banks in the banking sector has substantially decreased while the ownership structure of banks has changed in favor of foreign banks.

As of December 2006, 50 banks were operating in Turkey, 13 of them being investment and development banks and the rest commercial banks⁵¹. The state owned 4 commercial and 3 investment banks, while there were 15 foreign banks. Table 4 illustrates the market shares of

⁴⁹ Alper, Önis, 'The Turkish Banking System, Financial Crises and the IMF in the Age of Capital Account Liberalization: A Political Economy Perspective', 2003.

⁵⁰ CEM, 2006.

⁵¹ CBT, 2008.

state-owned banks, private banks, the SDIF, foreign banks as well as investment and development banks by the end of 2005 and 2006.

Table 4: Market Shares of Banks

	Share in Total Assets (%)		Share in Total Loans (%)		Share in Total Deposits (%)	
	12.2005	12.2006	12.2005	12.2006	12.2005	12.2006
Investment and Development Banks	3.2	3.1	3.8	3.3		
Deposit Banks	94	94	92	92.4	96.6	96.3
State	30.6	28.9	20.1	21.0	37.5	35.4
Private	58.3	53.2	65.4	56.6	55.1	51.0
Foreign	5.1	11.9	6.5	14.8	4.0	9.9
Participation Banks	2.4	2.8	4.1	4.3	3.3	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Directorate General of Press and Information,

<http://www.byegm.gov.tr/REFERENCES/banking.htm>, 28.02.2008.

3.3.2. Exchange Rate Policy

Together with formal inflation targeting, the CBT is implementing a floating exchange rate regime. The main policy tool to achieve the inflation target is short-term interest rates. Thus, the foreign exchange (FX) rate is not a target or a policy tool. Exchange rates are determined through foreign exchange market supply and demand conditions, and the CBT does not pursue an exchange rate target⁵².

A strong foreign exchange reserves position is crucial in Turkey for eliminating negative effects of internal and external shocks, for boosting confidence and for reducing in the long-term the high-cost remittance accounts that compose a big part of the liabilities side of the CBT balance sheet. Therefore, following a reasonable reserve-raising policy, the Central Bank occasionally (in case where currency markets are volatile and illiquid) starts foreign exchange reserve purchase auctions to increase these reserves⁵³.

⁵² Yilmaz, BIS Review, 1/2007.

⁵³ Yilmaz, BIS Review, 1/2007.

4. IMPLICATIONS OF TURKISH EU MEMBERSHIP ON MIGRATION FLOWS

This chapter will deal with the future development of migration from Turkey towards the EU. The EU membership prospect is an essential part of current Turkish politics. Therefore, future economic and political developments will play a determining role in the context, number as well as composition of immigration from Turkey.

Forecasting the migration effect of Turkish membership to the EU is fairly complicated. In European communities, there is a widespread fear that in case of full membership, Turkish workers would flood especially Western Europe. Nevertheless, the prediction is different if the long-term growth scenario in Turkey and the EU is taken into consideration. Experience from similar Mediterranean countries – Spain, Portugal and Greece – shows that a negotiations period characterized by sustainable growth as well as implementation of effective reforms can slow down and even eliminate migration⁵⁴. It can be argued that Turkish EU membership would not stop or completely reverse immigration. However, migration would be greater in case if Turkey's membership prospect is lost⁵⁵.

The first subchapter will describe the characteristics of the labor market in Turkey. The next part will deal with international migration which is going to be an important factor in Turkey-EU relations. Another important issue, illegal (transit) migration over Turkey towards the EU is the focus of the following subchapter. Finally, two migration models will be built and several growth and immigration scenarios made in recent years will be described.

4.1. Turkey's Labor Market During Negotiations, EU-Accession and Transition

Turkey has a large and young population. Income disparity, youth unemployment and informality in business sectors can be named among the most important labor market problems. In the last few years, from 2000 until 2005, the unemployment rate increased from 6.5% to 10.3%. In comparison with the rates in several EU member states, unemployment in Turkey is not very high. Being 10.3% in 2005, Turkish unemployment rate was slightly above that of Germany (9.5%), France (9.7%) and below that of Poland (17.7%). In 2006 and 2007, Turkish unemployment fell to 9.9% and 8.8%, respectively (see Table 5).

⁵⁴ Erzan, Kuzubas, Yildiz, 'Growth and Immigration Scenarios for Turkey and the EU', 2004.

⁵⁵ Erzan, Kirisci, 'Turkish Immigrants: Their Integration within the EU and Migration to Turkey', 2004.

Table 5: Turkish Labor Force Data 2006 (average) – July 2007

	Turkey		Urban Areas		Rural Areas	
	2006	07/2007	2006	07/2007	2006	07/2007
Non-institutional Civilian Population (in 1000)	72.606	73.567	45.424	46.445	27.221	27.122
Population over 15 Years (in 1000)	51.668	52.581	32.743	33.587	18.958	18.994
Work Force (in 1000)	24.776	26.043	14.984	15.511	10.524	10.532
Employed (in 1000)	22.330	23.747	13.267	13.778	9.990	9.968
Unemployed (in 1000)	2.446	2.296	1.716	1.732	534	564
Labor Force Participation Rate (%)	48,0	49,5	45,8	46,2	55,5	55,4
Employment Rate (%)	43,2	45,2	40,5	41,0	52,7	52,5
Unemployment Rate (%)	9,9	8,8	11,5	11,2	5,1	5,4
Non-agricultural Unemployment Rate (%)	12,6	11,6	11,9	11,5	10,8	11,7
Youth Unemployment Rate (%)	17,1	18,6	21,6	22,4	10,3	12,7
Underemployment Rate (%)	3,6	3,1	3,1	2,9	4,2	3,5
Youth Underemployment (*)	4,1	3,2	3,3	2,9	5,4	3,6
Population not in Labor Force	26.892	26.538	17.760	18.076	8.433	8.462

* Population between 15 and 24 Years of Age

Source: Turkish Statistical Institute (TURKSTAT), 2007.

However, some other labor market indicators reveal a less impressive picture. The official employment rate which is only 45,2% (in 2007) is below the EU average. Additionally, a large share of the labor force is in the rural sector. The rather low employment rate in Turkey can be explained through the huge informal sector on the one hand, and the exceptionally low female participation to workforce, on the other. In underdeveloped regions of the country, high inactivity ratios are accompanied by high (long-term) unemployment and accumulation of social backwardness.

Turkey's labor market structure is the product of demographic and economic transformation. Similarly to other developing countries, there has been a demographic transition creating new entrants to the labor market. In order to promote economic growth, however, the new work force has to be absorbed to the market through firm dynamism and job creation. This

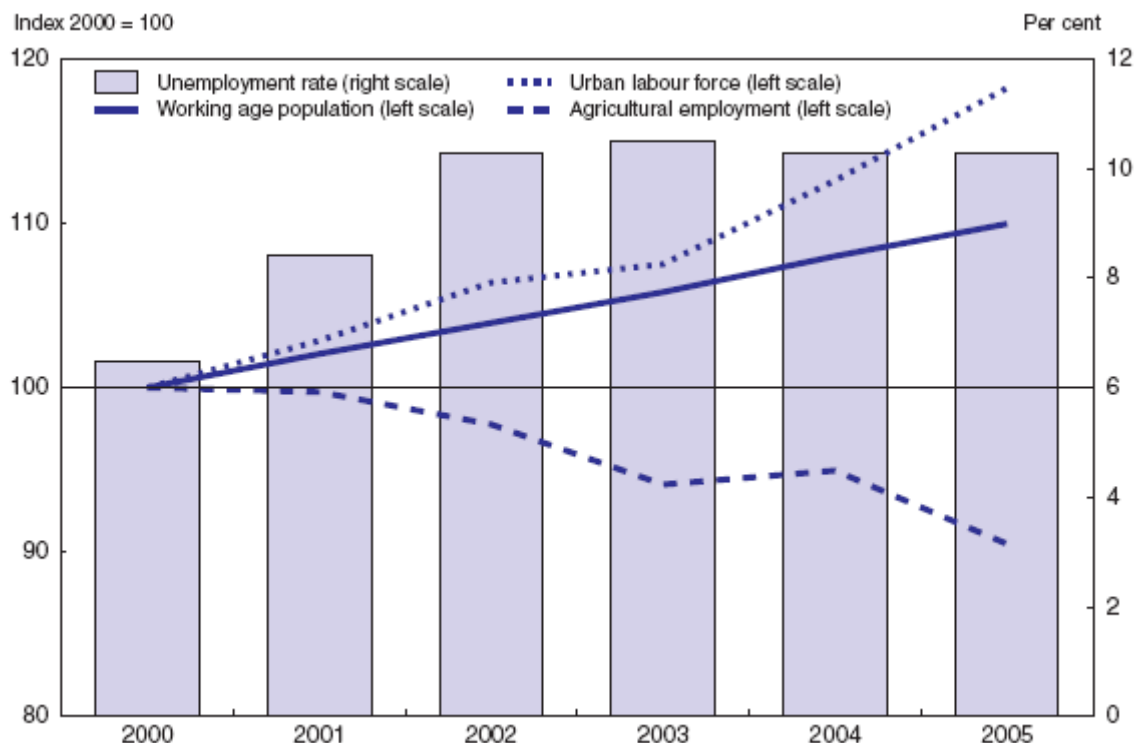
constitutes a central challenge since the growth of working-age population is above 2 per cent, which means that by 2020, over 21 million young people will be looking for employment⁵⁶.

In addition to the demographic change, the population was transformed from a primarily rural-agrarian society to an urban-industrial one. Roles, household preferences as well as labor force participation decisions have dramatically changed. Still, the relatively low employment-to-population ratio and female participation to workforce have to be increased.

There are serious labor market differences between rural and urban settlements. In terms of physical infrastructure and human capital endowments, villages and small cities - especially in the eastern part of the country - lag behind larger cities. Similarly to some CEE countries, on the supply side of the labor market, regional labor market differences are alleviated to some extent through commuting and internal migration from regions with high unemployment rates towards areas with job opportunities or lower unemployment rates.

Figure 9 illustrates the developments in the Turkish labor force in recent years. It is remarkable that working age population is growing. Moreover, the number of jobs which agriculture is providing is on the decline, whereas urban labor force has a growing tendency.

Figure 9: Working Age Population Growth, Exits from Agriculture and Unemployment



Source: OECD Economic Surveys: Turkey, OECD 2006 from TURKSTAT and OECD.

⁵⁶ OECD Employment Outlook, 2005.

Table 6 compares several birth characteristics of Turkish population living in cities and rural areas on the one hand, and in the western and eastern part of the country, on the other. It is remarkable that the share of women without education as well as the birth and baby death rate is higher on the countryside and in the eastern part of the country. This situation is reflected to social backwardness as well as lower income in certain areas.

Table 6: A Comparison of Characteristics of Turkish Population (2003)

	Countryside	Cities	East	West
Uneducated Women (%)	31	18	51	15
Birth Rate	2.65	2.06	3.65	1.88
Usage of Birth Control	65	74	58	74
Baby Death Rate	39	23	41	22

Source: Icdygu, 2004.

The following table gives demographic data for Turkey and compares them with those of Austria, Bulgaria, Greece and Germany, which in terms of population is similar to Turkey. It can be observed that Turkey's rate of population growth as well as birth rate is higher than in the countries of comparison. Nevertheless, the rate of child death is also dramatically higher. Another remarkable point is that Turkey has a large share of young population, whereas the percentage of elder population is approximately one third of that of compared countries.

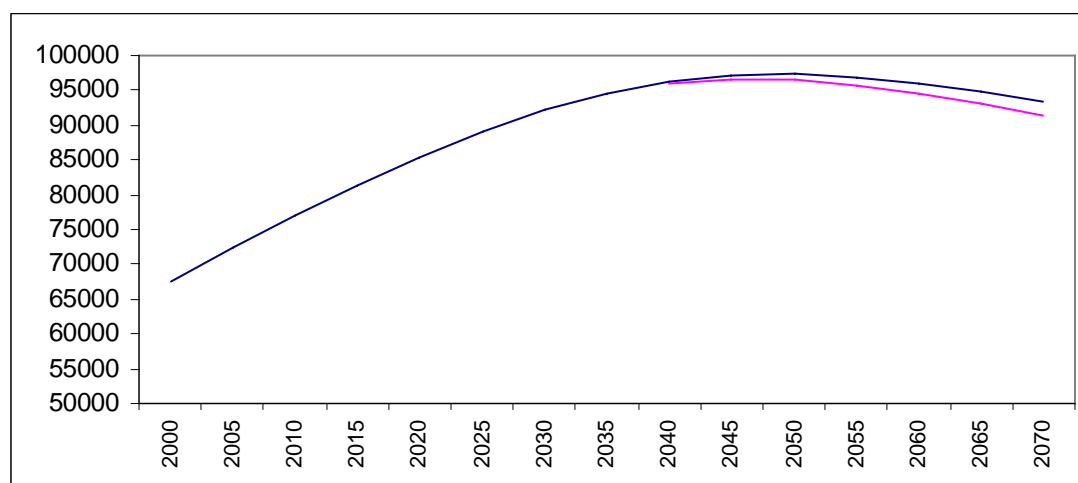
Table 7: Comparison of Demographic Data of Turkey with Several EU Countries (2004)

	Germany	Bulgaria	Turkey	Greece	Austria
Population	82 m	8m	68m	11m	8m
Population Density /km ²	231	71	90	80	96
Population Growth Rate	0.1	-0.5	1.5	0.0	0.2
Birth Rate	1.3	1.2	2.2	1.3	1.3
Rate of Child Death	4.2	14.5	29.0	5.9	4.8
Life Expectancy	78	73	70	77	78
Urbanization (%)	88	67	66	60	68
Population under 14 Years (%)	15	14.6	30.0	15	17
Population over 65 years (%)	17.5	17.0	5.5	17.5	16
GDP per Head (in 1000 €)					

Source: Icdygu, 2004.

If Turkey joins the EU in the earliest possible date, which is the year 2015, it will have a population of almost 81.3 million people, which will be slightly smaller than that of Germany (82.4 million). Both countries will then account for over 14% of EU28 population. By 2025, Turkey alone would be the largest EU member state with 89.1 million people until reaching its highest population in 2050. The following graph illustrates the population estimation for the period between 2000 and 2070⁵⁷.

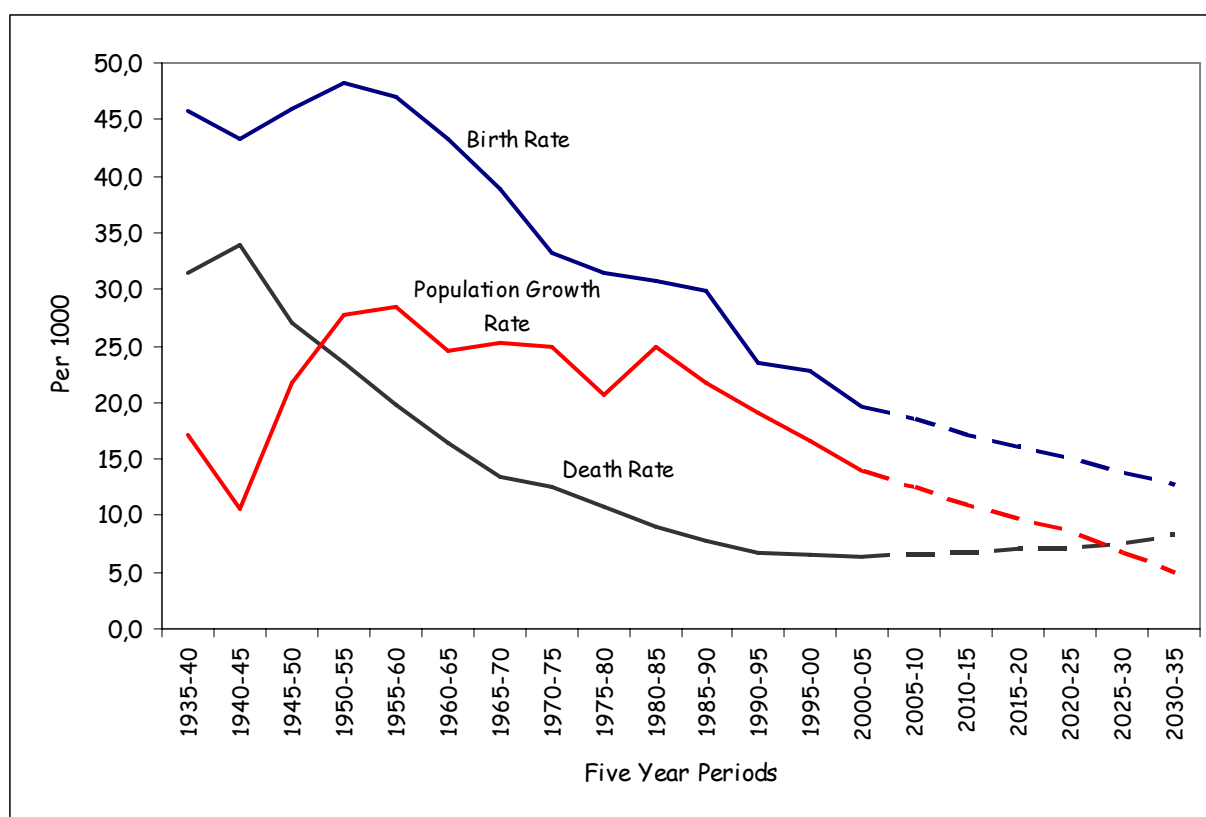
Figure 10: Change in the Turkish Population Structure (2000-2070)



Source: Icdygu, 2004.

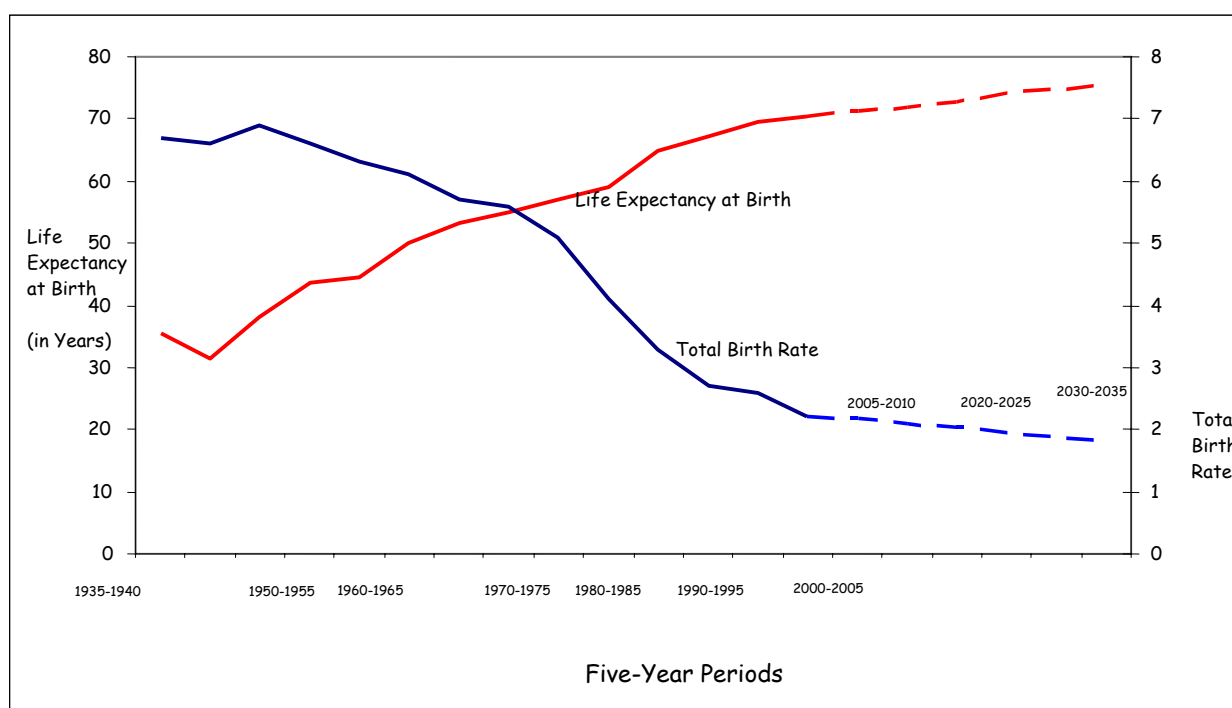
⁵⁷ The pink line shows the population estimation in the absence of migration.

Figure 11: Changes in Birth, Population Growth and Death Rates (1935-2035)



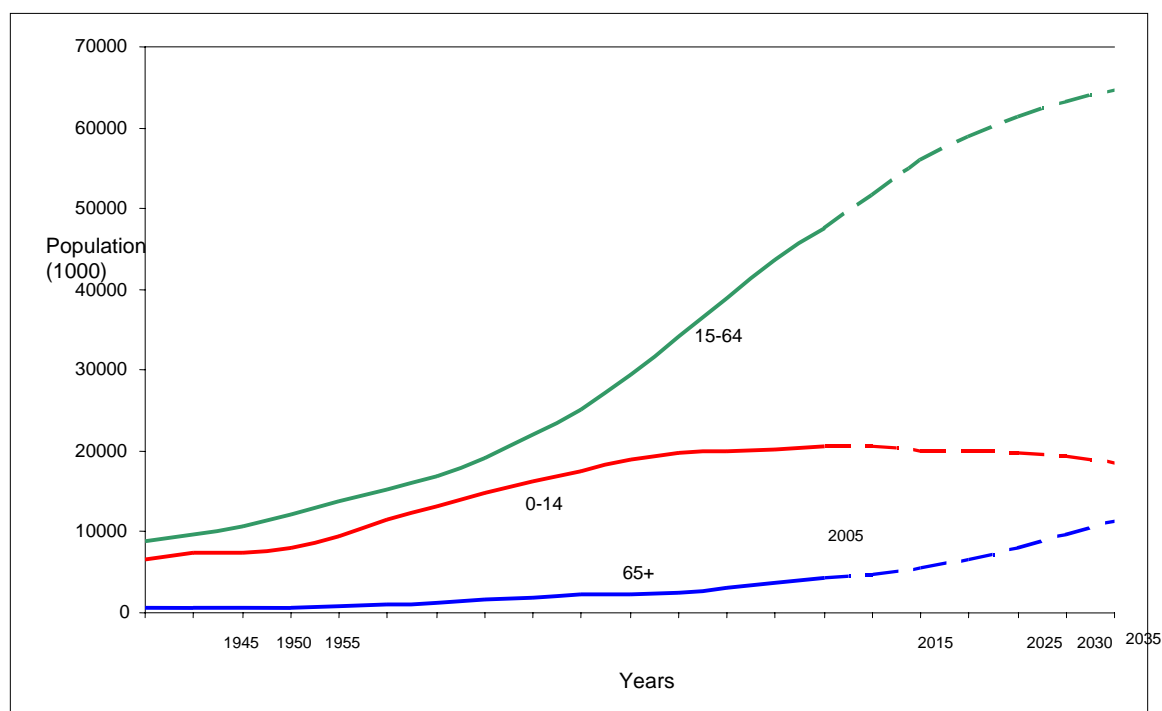
Source: Icdygu, 2004.

Figure 12: Life Expectancy at Birth and Total Birth Rate (1935-2035)



Source: Icdygu, 2004.

Figure 13: Age Groups (1935-2035)



Source: Icdygu, 2004.

From figures 11, 12 and 13, it can be deduced that Turkey will have a large labor force at the time of possible accession to the EU. By 2015, the working age population will have the largest share in contrast to children under 14 years and retired people. According to the same predictions, this situation will continue also after the transition period of (at least) 7 years.

In 2020, the productive part of the population - between ages of 25 and 49 - will account for 31.3 million people making up almost 39.36% of the whole population (see Table 8). In comparison, the share of the same age group in the EU15 countries will be 31.7% (see Table 9). Similarly, the 0-14 age group, which accounted for 29.3% of the Turkish population in 2000, is predicted to make up only 20.52% of the population in 2020. Despite the fall in the share of the youngest age group, this rate is higher than in the EU15 member states where the share of the population under 15 years will fall from 16.8% in 2000 to 13.1% in 2020.

As it can be observed in figures 11 and 12, the birth and population growth rates in Turkey are falling, while the life expectancy at birth is rising. According to forecasts, both in Turkey and the EU15, in the 40-year-period between 1980 and 2020, there will be a large drop in the share of young population under 25 years, whereas the age groups over 50 years will grow.

Table 8: Shares of Age Groups in Turkey

Year	0-14 years	15-24 years	25-49 years	50-64 years	65-79 years	80+ years
1980	40.5%	19.9%	27.5%	8.4%	3.7%	0.7%
2000	29.3%	20.1%	35.6%	9.8%	5.1%	0.9%
2020	20.52%	14.54%	39.36%	16.41%	7.3%	1.86%

Source: Özcan in Laciner, Özcan, Bal, 2004, p.153.

Table 9: Shares of Age Groups in EU15

Year	0-14 years	15-24 years	25-49 years	50-64 years	65-79 years	80+ years
1980	21.8%	15.8%	32.9%	15.6%	11.5%	2.4%
2000	16.8%	12.4%	37.0%	17.5%	12.6%	3.7%
2020	13.1%	10.3%	31.7%	22.5%	15.8%	6.6%

Source: Özcan in Laciner, Özcan, Bal, 2004, p.150.

While a high unemployment rate and increasing working age population in Turkey will foster migration, the ageing of the population will have a negative effect on migration flows. Another decisive point is the skill composition of the Turkish labor force and its complementarity to the European populations. According to the OECD report on ‘The Profile of Immigrants in the 21st Century’, only 6.3% of Turkish migrants in OECD countries are ‘professionals’, while 10.4% are ‘technicians’ and the rest ‘operators’⁵⁸. As it will be dealt with later on, the skills of immigrants are as important as their number.

Wages, Employment and Unemployment in Turkey

Labor costs have special relevance for the flexibility of the labor market and the employment growth of a country. A high minimum wage in relation to the average wage has negative impacts on the labor market, particularly concerning the low-skilled work force as firms are unwilling to pay them higher wages⁵⁹.

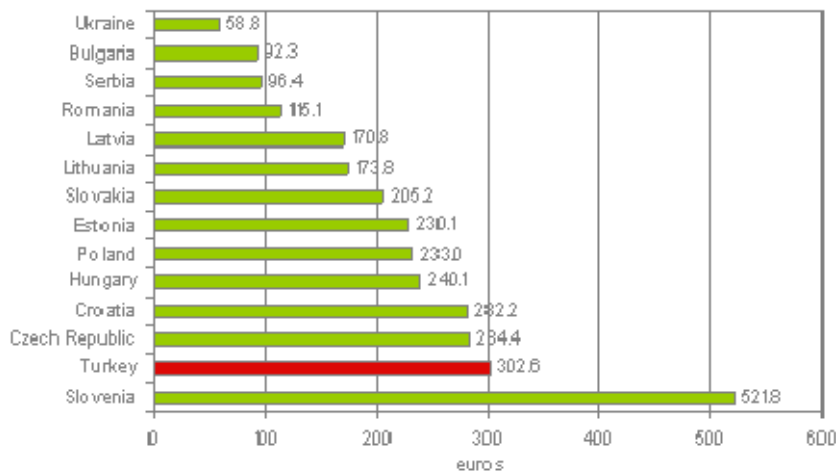
The minimum wage in Turkey amounted for €302.61 in (January) 2007, which meant that the ratio of the lowest labor cost to the GDP per capita in some regions of the country was above

⁵⁸ Cumhuriyet, 23.02.2008.

⁵⁹ Schwobel, 2007.

100%⁶⁰. Figure 14 compares the monthly gross statutory minimum wages in CEE countries and Turkey. In addition to the high labor costs for employers, the burden for employees was also significant. In 2005, the tax burden for wage earners with low income was 41.9%, being 2.5% higher than the EU25 average and 10.2% higher than in Portugal – a similar low-productivity country⁶¹.

Figure 14: Monthly Gross Statutory Minimum Wages



Source: Euromonitor (from Federation of European Employers)

Consequently, despite the improvements in recent years, especially the high real GDP growth, the unemployment rate in Turkey remained unchanged around an average of 9.9% between 2001 and 2006. Nevertheless, the rate in less developed areas of the country is extremely high. While a reform on the tax system was implemented in 2002, the matter of high minimum wage was not dealt with yet. This situation has negative implications on the Turkish economy. First, low employment is associated with low productivity. Labor productivity in terms of GDP per head in purchasing power standards is very low in Turkey – 40.6% of the EU25 average (in 2006). Second, the GDP per capita might fall because of the growing population and/or the stagnating or declining labor market. Third, with high minimum wages, Turkey could lose, at least to some extent, its attractiveness to foreign investors⁶².

⁶⁰ Euromonitor,
http://www.euromonitor.com/Turkeys_minimum_wage_is_preventing_employment_opportunities, 04.10.2007.

⁶¹ Euromonitor,
http://www.euromonitor.com/Turkeys_minimum_wage_is_preventing_employment_opportunities, 04.10.2007.

⁶² Euromonitor,
http://www.euromonitor.com/Turkeys_minimum_wage_is_preventing_employment_opportunities, 04.10.2007.

Fourth, in order to be able to sustain and increase the amount of FDI to Turkey, the relatively high minimum wage has to be changed. Lastly, the amelioration of the labor market, especially reduction of the unemployment rate, is of crucial importance for Turkey's EU membership prospect as it will have a direct effect on migration.

Since Turkey has a growing population and workers are willing to switch from the traditional sectors, especially agriculture, to other labor market fields such as industry and services, Turkey has a good potential of labor market and will not suffer from labor shortages. Through further reforms, this potential should be used and the employment rate has to be increased.

4.2. International Migration as a Factor in Turkey-EU Relations

Large-scale immigration from Turkey towards the EU as well as to other parts of the world already started in the 1960s. In numerous EU member countries, the period of active need of foreign workforce came to an end after the oil crisis in 1973-74⁶³. Consequently, immigration policies have gradually become more restrictive, and it has been mostly the relatives of former migrants, asylum seekers and refugees who have migrated to Europe.

Migration of Turkish workers slowed down but continued a steady flow since the 1960s. By the early 2000's, more than 3 million Turkish workers and their dependants were living in Europe. Of all early emigrants, between 30-40% have returned permanently to Turkey⁶⁴. Thus, a significant minority of Turks has either direct or indirect migration experience.

The large share of Turkish immigrants in European countries has led to the prevalent assumption that full membership of Turkey and free movement of labor following a transition period would end in mass migration towards the EU in general and Western Europe in particular. According to highly speculative scenarios, 25% of Turkish population would move to the EU if restrictions on labor mobility were removed⁶⁵.

On the other hand, the EU Commission's Impact Study ('Issues Arising from Turkey's Membership Perspective') in 2004 predicted that until 2030, the number of Turkish immigrants in the Union would be between 0.5 and 4.4 million under the assumption of free mobility of labor from 2015 on. The key determinant will doubtlessly be the long-term growth scenario in the EU and especially in Turkey. The GDP per head at purchasing power parity

⁶³ Flam, 'Turkey and the EU: Politics and Economics of Accession', 2003, <http://www.iies.su.se>, p.10.

⁶⁴ Icduygu, OECD 2005, Chapter 4, 'Migration, Remittances and Development'.

⁶⁵ Niewboer, De Standard, 2004.

(\$5349 in 2006) in Turkey is only 17.76% of the EU average. The question how this relation will evolve in the next 10 to 20 years is essential for migration predictions.

In neo-classical theory, the major economic determinant of migration is income inequality. The Keynesian approach also includes the unemployment gap to the determinants. Indeed, both factors play an important role in the empirical analysis. Economic growth, especially one that exceeds growth of population, will reduce unemployment (Erzan, Kirisci, 2004).

Concerning migration in Turkish-EU relations, three important questions exist (Pastore, 2006): Firstly, is the demographic structure of Turkey and the Union complementary or incompatible? Secondly, in the negotiations period, which migration and human mobility regime should be adopted? Lastly, how should the irregular transit flows across Turkey towards the EU be managed or prevented?

First and foremost, taking into account that the earliest possible accession date for Turkey is 2015 and this will be followed by a transition period of at least 7 years; even in the most optimistic case, Turkish labor force will not have free mobility in the EU before 2022. In the time period until 2022, the demographic structure of many EU countries will change. Considering the expected demographic developments in the EU – ageing of populations and lowering birth rates – it can be concluded that the relatively young Turkish population could provide the needed work force to the Union.

On the other hand, the possibility of uneven distribution of Turkish migrants inside the EU could be challenging since countries with a disproportionately high immigrant population could demand a longer transition period than other member states⁶⁶. In this case, solely some member states would allow for free circulation⁶⁷.

The second question concerns the migration and human mobility regime, which could be revised and gradually softened during different phases of the negotiations period as a

⁶⁶ The regional concentration of Turkish immigrants in Europe is not homogeneous. Germany, France (particularly Rhone-Alpes), Austria and the Netherlands (particularly Southern Netherlands) are places which host the majority of Turkish immigrants living in Europe (OECD, 2004). The figure in Annex 1 demonstrates the distribution of Turks in European regions in 2001 as a percentage of the total population.

As an example, according to employment data of the OECD, in 2001, approximately 34% of migrant workers in Austria were living in Vienna, making out 15% of the total labor force of the region. However, the regional concentration of migrants differs from region to region. Due to their traditional specialization in the textile and clothing industry, Turks reside in addition to Vienna also in Vorarlberg, Tyrol and Lower Austria.

⁶⁷ Pastore, 'International Migration as a Factor in Turkey-EU Relations', 2006.

‘confidence building measure’. Especially visa regulations for short duration stays could be made more flexible to the benefit of both Turkey and EU members.

Moreover, as Turkey will have a ‘complementary’ demographic structure to Europe, more attention should be given to the issue of human capital production before an eventual decision on Turkey’s accession to the EU is made. Special policy programs to enhance the education and training systems in Turkey on national level as well as more flexible systems of migration across Europe are of crucial importance⁶⁸.

The third question involves the fact that Turkey is not only a sending country, but also a receiving one, and a major transit area to Europe. In order to manage transit flows across Turkey better, a close cooperation between Turkey and the EU is needed. It can be expected that when the current barriers to international movements between Turkey and the Union are softened or removed, a part of Turkey’s irregular residents, asylum seekers and (illegal) refugees will also intend to migrate westward.

Since the strict control and ‘filtering’ of unauthorized flows across Turkey towards the EU has heavy financial as well as humanitarian costs, it is highly difficult for Turkey to manage mixed flows without burden sharing with EU member states⁶⁹. Thus, a full cooperation between Turkey and the Union is crucial for a healthy illegal migration management.

4.3. Illegal migration to the European Union and its Effects on Turkey-EU Relations

People immigrate due to a variety of reasons – from the wish of a better life or the income differentials between north and south, to regional and civil wars or political as well as ethnic pressures⁷⁰. Several factors affect the immigrants’ decision on where they choose to live. These are presence of family members or of people of the same ethnic origin, geographical proximity of the receiving country to the source country, and economic attractiveness of the receiving country among others⁷¹.

Parallel or as a response to immigration policies in receiving countries, which become stricter with time, more and more potential migrants go through illegal ways and get in contact with international criminal organizations.

⁶⁸ Pastore, ‘International Migration as a Factor in Turkey-EU Relations’, 2006.

⁶⁹ Pastore, ‘International Migration as a Factor in Turkey-EU Relations’, 2006.

⁷⁰ Laciner, Özcan, Bal, 2004, p.143.

⁷¹ OECD, 2004.

This situation makes it even more difficult for countries of destination to control their borders – especially sea borders – and to solve the problem of illegal migration in the long-term. The only possible long-term solution to the matter lies in a substantive approach to the basic problems in source countries, such as prevention of human rights abuses and economic instability.

For the EU as well as for Turkey, illegal migration is a serious problem. The main reason behind illegal migration to the EU is the huge difference in European welfare to the conditions in source countries. Politicians in developed nations tinker with migration policies⁷² that aim to open the gates to only a limited number of migrants, refugees and asylum seekers.

In general, the restrictions on visa- and permit of stay- regulations become heavier, while border controls are improved and ‘refoulement’ agreements are made with transit countries binding them to take back illegal migrants. Nevertheless, measures taken by richer countries to prevent (illegal) migration do not affect the desire and decisiveness of people to migrate but - to some extent - plays a role in that they find their way to the EU illegally. The existence of ‘buffer zones’ is also not enough to keep migrants outside of EU borders.

The number of illegal migrants is hard to determine but is thought to be ‘smaller than the legal sort’⁷³. It has become impossible to keep a record in the EU since borders can be passed easily between a large number of member states.

The fact that a number of illegal migrants have been given the possibility to stay encourages others to go through the same way. Another factor encouraging potential illegal migrants is the example of those who have entered the EU illegally and but have not got a heavy punishment. As a matter of fact, it is still an open question if illegal migration is a ‘crime’ which should be punished. In EU member states, often only a minimum penalty is given to illegal migrants that can vary between monetary sentence and imprisonment for two years.

The scope of the problem in Turkey is even wider. While Turkey was commonly known as a source country until recent years, today it is also recognized as one of the transit countries lying on the route of illegal migrants trying to reach Europe through land or sea. Two main motives exist for migrants to choose Turkey: Firstly, the political turmoil and wars in neighboring countries and secondly, Turkey’s geographical status between east and west as

⁷² The Economist, 5.1.2008.

⁷³ The Economist, 5.1.2008.

well as north and south, making it a perfect transit country for those who aim to migrate to the north or west, particularly to the EU⁷⁴.

As a matter of fact, Turkey is not a country of final destination but a transit one. According to a survey made in 1995 by the International Organization for Migration (IOM), 92% of illegal migrants caught in Turkey aimed to go westward, mainly to the EU, whereas only 8% wanted to stay⁷⁵. A high percentage of migration from or over Turkey to the EU happens through illegal ways.

Cooperation and burden sharing between Turkey and the EU are key words for handling the transit illegal migration problem since the matter is too complicated. According to the non-refoulement principle of the Convention relating to the Status of Refugees (1951) and its 1967 Protocol,

‘no Contracting State shall expel or return ("refouler") a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion.’ (Article 33, Convention relating to the Status of Refugees, 1951).

Turkey gives temporary protection to refugees who have applied for asylum in a third country, but those who miss the application deadlines of the United Nations High Commissioner for Refugees, cannot be replaced. This situation has the consequence that Turkey has to act against the non-refoulement principle of the 1951 Convention. As a result, the EU claims that the regulations in Turkey and the fact that only few refugees can find protection there causes migrants to try to enter the EU illegally (USCR Country Information: Turkey, 2001). In addition, several EU countries allege Turkey of not controlling its borders appropriately, not applying severe punishment to criminals trafficking in humans and acting against the non-refoulement principle⁷⁶.

While these accusations are partly true, the policies of the EU itself are directed more towards limiting the legal migration than protecting refugees and asylum seekers. This intention can also be recognized in the policies towards Turkey. Indeed, there is a widespread idea that Turkey should play the role of a ‘buffer zone’ between the EU and source countries neighboring the country.

⁷⁴ Laciner, Özcan, Bal, 2004, p.179.

⁷⁵ Laciner, Özcan, Bal, 2004, p.179.

⁷⁶ Laciner, Özcan, Bal, 2004, p.184f.

Nevertheless, the burden of playing such a role is too heavy and cooperation is essential for successfully dealing with illegal migration. In the medium and long term, it seems clear that Turkey will benefit from cooperation with the EU through burden sharing and projects on fighting illegal migration. For the EU, benefits of cooperation will appear already in the short run when Turkey filters unauthorized flows and makes legal adaptations during the negotiations period⁷⁷.

On the other hand, it would be true to say that the more stable Turkey will become politically as well as economically, the more it will change to a country of destination from a transit country. Indeed, parallel to the positive developments in the country, part of the potential migrants heading towards the EU will prefer staying in Turkey. This will happen due to the relatively low population density in Turkey as well as Turkey's cultural, geographical and religious similarity to several source countries⁷⁸.

4.4. Migration Models

4.4.1. Model of Migration as an Investment in Human Capital

In this model, migration is dealt within a cost- returns framework meaning that a potential migrant will leave their source area only under the condition that the costs of migration are equal to or less than the difference of the present discounted values of the benefits in the source and destination country.

Migration is then a function of the discounted present values of the income in both countries:

$$m_{ij}(t) = F [(V_{j(t)} - V_{i(t)}) / V_{i(t)}], F' > 0 \text{ with}$$

$m_{ij}(t)$ denoting the migration of work force from area (i) to area (j) in period (t),

$V_{j(t)}$ denoting the discounted present value of the expected real income stream in area (j), and

$V_{i(t)}$ giving the discounted present value of the expected real income stream in area (i).

Individuals are seeking to maximize their utility function that stands in relation with the expected present value of their income, while the discount period is the individual's lifetime.

As a next step, the discounted present value of the unexpected real income stream over a worker's planning horizon can be defined as:

⁷⁷ Laciner, Özcan, Bal, 2004, p.201.

⁷⁸ Laciner, Özcan, Bal, 2004, p.199f.

$$V_{i(0)} = S_{t=0}^u P_{i(t)} Y_{i(t)} e^{-rt} dt; \text{ where:}$$

$Y_{i(t)}$ is the net real income in area (i) in period t,

$P_{i(t)}$ is the probability of having a job (employment opportunity) in area (i) in period (t), and

r is the discount rate.

The employment opportunity in area (i) can be calculated by:

$$P_{i(t)} = (E_i / L_i) (t); \text{ where:}$$

E_i is the existing employed labor force in area (i) and

L_i is the existing total labor force in area (i).

Then, the discounted present value of the unexpected real income stream over a worker's planning horizon in the destination area can be defined as:

$$V_{j(0)} = S_{t=0}^u P_{j(t)} Y_{j(t)} e^{-rt} dt - C(0); \text{ where:}$$

$Y_{j(t)}$ gives the net real income in area (j) in period (t),

$P_{j(t)}$ gives the probability of having a job in area (j) in period (t), and

$C(0)$ is the initial cost of migration.

Analogue to area (i), the employment opportunity in area (j) can be calculated by:

$$P_{j(t)} = (E_j / L_j) (t).$$

Under the assumption that the real income differentials do not change over time, the model can be simplified to a one-period time horizon:

$$m_{ij} = F [(Y_{(t)}], F' > 0 \text{ and}$$

$$Y(t) = [(E_j / L_j) (t).Y_j(t) - (E_i / L_j) (t).Y_i(t)] / (E_i / L_i) (t).Y_i(t).$$

Then, the migration function can be rewritten as a function of the net real income $Y(t)$ and the employment opportunity $E(t)$:

$$m_{ij}(t) = G[Y(t), E(t)], G'_Y > 0, G'_E > 0 ; \text{ while:}$$

$$Y(t) = (Y_j(t) - Y_i(t)) / Y_i(t) > 0 \text{ and } E(t) = ((E_j / L_j) - (E_i / L_i)(t)) / (E_i / L_i)(t) > 0.$$

As the unemployment rate can be calculated as $U = (1 - E) / L$, the migration function can also be rewritten as a function of the net real income $Y(t)$ and the unemployment rate $U(t)$:

$$m_{ij}(t) = H[Y(t), U(t)], H'_Y > 0, H'_U > 0 ; \text{ while :}$$

$$U(t) = (U_j(t) - U_i(t)) / U_i(t).$$

In this model, migration is a decision which cannot be reversed without high costs. Thus, assuming an 'adaptive expectations form', the migration function becomes:

$$m_{ij}(t) = f[Y(t), U(t), m_{ij}(t-1)].$$

Finally, by separating the push- from the pull-factors, the same equation takes the form:

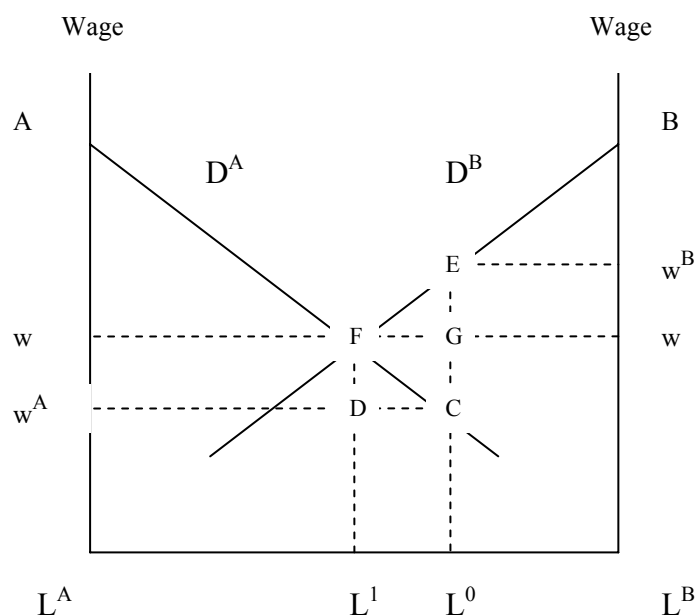
$$m_{ij}(t) = f[Y_{i(t)}, Y_{j(t)}, U_{i(t)}, U_{j(t)}, m_{ij}(t-1)].$$

Economic Effects of Migration

The following graph (Figure 15) illustrates the effects of migration from country A to country B. On the horizontal axis, the total labor supply of the countries is shown while the vertical axis demonstrates the wages. As a first step, labor is assumed to be homogenous, meaning that there is no difference in the skill level of workers. Furthermore, the supply of labor is assumed to be inelastic.

The D^A and D^B curves show the demand for labor in country A and B, respectively. At the beginning, the labor supply in country A is equal to the segment $L^A L^0$, whereas the supply in country B is $L^B L^0$. Without migration, the equilibrium wage in country B (w^B) is higher than that in country A (w^A).

Figure 15: The Economic Effects of Migration



Source: Flam, 2003, Seminar Paper No. 718, p. 49.

When free circulation between the two countries is allowed, workers of country A will move to country B in order to earn higher wages. Migration will end at the time when the wages in the two countries are equalized at the wage level w . Then, the workers in the line segment L^1L^0 of country A will have immigrated to country B.

Hence, one of the economic consequences of migration is the fall in the wage level in the country of destination and the wage increase in the source country. The winners of the new situation are the migrants and the work force in the source country (A), while the workers in the receiving country (B) are the losers.

Under the assumption that capital does not move according to earnings differences, for capital owners, the opposite is true: Capital owners of country A earn instead of the area Aw^AC only the area AwF . Those in country B have an advantage because after migration, they earn the area BFw instead of BEw^B .

Migration of workers from A to B decreases the GDP in country A while increasing that in country B. This can be observed in the increase of total social welfare gained by migrants, on the one hand, and capital owners in country B, on the other. The total social surplus, equal to the area ECF , results from a more efficient allocation of labor. The migrants can work more

efficiently in the receiving country. Moreover, optimal allocation is achieved when the marginal productivity of labor in both countries becomes equal.

The model assumes until here that labor is mobile and driven by wage differences in the absence of unemployment. At this stage, unemployment will be introduced. It will be assumed that before the beginning of migration, workers in the line segment L^1L^0 of country A are unemployed. Hence, those employed earn the wage w (and not w^A). Assuming that employment is determined by a lottery, the expected wage of workers in country A, calculated by the actual wage w times the probability of getting a job, will be between w and w^A . Since the expected wage in country A is still far below the fix wage in country B (w^B), once migration is allowed, workers will move to B.

A further assumption is that all the unemployed workers of country A move to country B in the hope of finding a job but the employment in country B remains unchanged. In this case, employment in country B will also be determined through a lottery, where migrants and national workers will have equal chances. The expected wage in B will fall from w^B and amount between w and w^B . Consequently, in the new equilibrium, both the actual and expected wage in B is higher than the actual wage in A. The expected wage in the receiving country can be higher since migrant workers take the risk of losing their job and demand a higher (expected) wage to compensate for the risk⁷⁹.

Thus, the model shows that migration can lead to lower wages in the receiving country and increase the unemployment at the same time. This conclusion will not be reversed in case of increasing employment in the receiving country or giving nationals better chances to get a job. Nevertheless, the skill composition as well as the complementarity or substitutability of

⁷⁹ In the 1970s, Harris and Todaro pointed to a relation between rural-urban migration and unemployment in their reinterpretation of the labor markets of less-developed countries (Krugman, Obstfeld, 2000, p.265). In countries with highly dualistic economies, high urban unemployment rates exist. Normally, this fact should emphasize the necessity of creating more urban jobs in manufacturing. However, Harris and Todaro argued that in spite of the high urban unemployment, workers from rural areas continue to migrate to cities. Thus, people from rural areas are ready to take the risk of being unemployed in urban areas for having the chance of getting a well-paid job in manufacturing. This chance depends on the number of available jobs.

According to Harris and Todaro, the increase in the number of manufacturing jobs will result in high migration flows from rural to urban areas and will increase the urban unemployment rate. Since each additional worker employed in manufacturing will be imitated by many others who will migrate from rural to urban regions, the gains of the employed will be offset by the losses of the unemployed (who are more in number). Therefore, the social benefit of increased employment in manufacturing will be lost.

migrants is decisive for the effects on native labor and capital. If immigrants have complementary skills to native workers, they increase the productivity and wages of native employees. Also, the social surplus resulting from migration increases.

Empirical research on impacts of immigration on Germany confirms this conclusion. It points to small but positive effects such that employment opportunities are not worsened, the wage of unskilled labor is decreased while that of skilled workers is increased, and the net present value of public transfers is positive (Flam, 2003, p.14). On the other hand, social costs and benefits of immigration such as integration and absorption of people to their new environment are more complicated to assess.

4.4.2. Migration Model with Uncertainty

In the migration model with uncertainty⁸⁰, migration is considered as an investment decision. It differs from the model of migration as an investment in human capital in that it considers risk in the objective function of a potential migrant⁸¹. According to this theory, a different behavior can be expected from different individuals regarding taking a risk. Again, the model uses the idea of optimal allocation from the portfolio analysis.

Each individual has a utility function (for one period) in form of:

$$U = a - ce^{-b\delta}; \text{ where}$$

U is the utility resulting from migration; a is a negative, and b and c are positive parameters, whereas δ is the net return from migration for this period. Because of the uncertainty about the costs and returns of migration, δ is a stochastic variable (Smith, 1979; David, 1974 from Xideas, 2003). It is assumed in the model that the net return of migration, which can be calculated through the experience of other migrants or the individual himself, is normally distributed:

$$\delta \sim N(\mu_\delta, \sigma_\delta^2).$$

It is further assumed that the migrant will try to maximize the expected value of utility (Farrar, 1962):

⁸⁰ Xideas, 'Modeling Migration Under Uncertainty', 2003.

⁸¹ The human capital approach assumes risk neutrality in human behavior (Xideas, 2003).

$$E(U) = a - c [\exp((-b\mu_\delta/2) + (b/2)^2 \sigma_\delta^2)] \rightarrow \max E(U) \approx \max [\mu_\delta - (b/2) \sigma_\delta^2].$$

The parameter b can be considered as the relative risk aversion coefficient (Xideas, 2003, p.155): $R = b > 0$. Risk aversion can be interpreted in the following way: An individual earns a random income Y and is offered an alternative income Y_0 . In this case, a risk averted person would accept the alternative income Y_0 which is smaller than the mean value of the random income $E(Y)$. The difference in the values is called the insurance premium. If $R = 0$, the individual is risk neutral.

There is a region A with a total population T , from where individuals can migrate to other regions (called region B) without any legal restrictions. However, each household decides on migration taking monetary and physic costs into consideration. The non-labor sources of pecuniary income can be transported and thus are not affected through migration (Xideas, 2003, p. 155).

For each household, two labor markets exist, the ones in region A and B, with differing wage distributions. The utility function of a household is: $U(Y) = a - ce^{-bY}$, where Y denotes the income.

In each period, a certain percentage of the population T , namely $\lambda_1 T_t = L_{1t}$ will migrate and the rest will remain in region A ($\lambda_2 T_t = L_{2t}$). Total population T is then calculated by:

$$T = L_{1t} + L_{2t}.$$

Each individual tries to maximize their utility function. Hence, it is true to say that the total population T aims to maximize the aggregate utility function $V(Y_t)$; whereas their income is calculated by:

$$Y_t = Y_{1t} + Y_{2t} = L_1 w_{1t} + L_2 w_{2t}.$$

Y_{1t} and Y_{2t} denote the income of migrants and of the population remaining in region A at time t , respectively. The variable w_1 gives the wage in labor markets outside the region A, while w_2 is the value of the wage in the labor market in A.

As the wages w_1 and w_2 are normally distributed variables, the expected aggregate utility $E[V(Y_t)]$ has to be maximized:

$$\max V(Y_t) \approx [E(Y) - \frac{1}{2} R \text{var}(Y_t)] = G; \text{ where}$$

$E(Y_t) = Y_t^-$, $\text{var}(Y_t)$ is the variance of income Y and R , the relative risk aversion coefficient, is equal to the parameter b . The expected income $E(Y)$ and the variance of income can be computed in the following way:

$$E(Y) = \text{avg}(w_1).L_1 + \text{avg}(w_2).L_2 \text{ and}$$

$$\text{Var}(Y) = \sigma_{w_1}^2.L_1^2 + \sigma_{w_2}^2.L_2^2 + 2L_1L_2\text{Cov}(w_1w_2).$$

Solving the system for L_1 , we obtain the number of migrants in the time period t :

$$L_{1t} = [\text{avg}(w_{2t}).\text{Cov}(w_1w_2) - \text{avg}(w_{1t}).\sigma_{w_2}^2] / [R.[\text{Cov}(w_1w_2)^2] - \sigma_{w_1}^2\sigma_{w_2}^2] = m_t.$$

Hence, migration from a region to another is dependant on the average wages in both labor markets. At this stage, unemployment variables can be added to the model since they also play a significant role in the potential migrants' decision and are (assumed to be) constant over one period.

The migration function can then be rewritten as:

$$m_{ij(t)} = f[\text{avg}(w_i), \text{avg}(w_j), U_i, U_j].$$

Through the inclusion of the relative risk aversion coefficient (R), the model takes uncertainty about wages in potential areas of destination into consideration. If the risk aversion equals zero ($R = 0$), then utility maximization is simply $\max G = E(Y)$.

Under the optimal allocation idea, the migration function applies also to more than two potential areas ($j > 2$). In this case, the migration decision depends on the unemployment rate and the average income in all (j) areas.

4.5. A Comparison of Growth and Migration Scenarios

In order to forecast migration effects of Turkish membership to the European Union, analytical studies either use statistical interferences based on scientifically designed surveys or econometric methods which take emigration countries' experiences before and after EU accession as a base. After finding out the quantifiable determinants of immigration for these countries, the results are used for the estimations for candidate countries or future member states⁸².

Lejour (2004) takes the long-term (15 year) migration median estimate for ten CEE countries as a base to assess the Turkish migration potential. For CEE countries, historical immigration experiences are used to determine the impact of income disparities and unemployment. The results are then applied to income differentials between the EU and emigration countries to estimate the migration effects. In the long term, 2.9 million people from CEE countries are expected to migrate. This number equals to 0.7% of the population of the EU15.

Analogously, Lejour applies the historical immigration figures for the Turkish population and the income differential between Turkey and the EU15 to forecast migration. In 2000, Turkish GDP per capita in terms of PPP accounted for 31% of the EU15 average. Using estimations of Turkish population for the year 2025, Lejour forecasts the number of migrants to be 2.7 million in the long-term, which is equal to 4% of Turkish population or to 0.7% of EU15 population – exactly the same percentage as the migrants from CEE countries.

Two main scenarios have been made for Turkey in its path towards the EU: a successful accession period characterized by high growth and free movement of labor from 2015 on; and the opposite picture – failed accession, low growth and strict restrictions on labor mobility. In the following subchapters, simulations based on migration experiences of countries will be compared. According to simulations made by Erzan, Kuzubas and Yildiz, the net flow of Turkish immigrants in the period between 2004 and 2030 will be between 1 and 2.1 million in the optimistic case and 2.7 million in the pessimistic one.

⁸² Erzan, Kuzubas, Yildiz, 'Growth and Immigration Scenarios for Turkey and the EU', 2004.

4.5.1. Scenario 1: Simulation Based on Migration Estimations to Germany from ‘All Europe’ (19 Source Countries)

In the first scenario, Erzan, Kuzubas and Yildiz used the same method (seemingly unrelated regression) as the EU Commission⁸³ for forecasting potential migration from 19 CEE countries (Austria, Belgium, Denmark, Finland, Greece, Holland, Iceland, Ireland, Italy, Luxembourg, Norway, Portugal, Sweden, Switzerland, Spain, Turkey, the United Kingdom and the Former Republic of Yugoslavia) to Germany in the period between 1967 and 2001. Germany was selected as the country of destination because of the large size of immigrants living there.

The equation used for obtaining the coefficients to be used in the emigration simulation for Turkey is as follows:

$$m_{fht} = \alpha_h + \beta_1 m_{fh,t-1} + \beta_2 m_{fh,t-2} + \beta_3 \ln(w_{ft}/w_{ht}) + \beta_4 \ln(w_{ht}) + \beta_5 \ln(e_{ft}) + \beta_6 \ln(e_{ht}) + u_{fht}$$

where m_{fht} denotes the share of migrating people from home country h to foreign country f at time t as a percent of total (home) population. The variable w_{ht} gives the income in the country of origin; while e_{ft} and e_{ht} are the employment rates in home and foreign. The income differential between h and f (w_{ft}/w_{ht}) is the material return to migration. The lagged migrant stocks ($m_{fh,t-1}$ and $m_{fh,t-2}$) are used to determine the ‘networking’ effect among migrants.

The FREE dummy variable refers to the introduction of free labor mobility within the EU, whereas GUEST captures the period between 1967 and 1973, when ‘guest worker’ agreements had been made between the considered countries. The values of estimated coefficients in the regression results were small meaning that inter-European migration was not affected to a large extent by the income and employment rate differences between Germany and emigration countries.

As a next step, the coefficients found through the migration estimations from ‘All Europe’ to Germany were applied in the migration simulation from Turkey, whereby the German GDP per capita growth was assumed to be 2% annually, the employment rate being the same as the 1991-2001 average. The first scenario described here anticipates full membership to the EU together with high growth and falling unemployment rate. Table 10 gives the assumed growth and unemployment rates.

⁸³ Brücker, Alvarez-Plata and Siliverstovs, 2003.

Table 10: High Growth Scenario for Turkey (2005-2030 annual values)

Urban GDP Growth		0.065
Urban Productivity Growth		0.03
Rural GDP Growth		0.02
Unemployment (in 2015)	Urban	0.13
	Average	0.09
Unemployment (in 2030)	Urban	0.05
	Average	0.04

Source: Erzan, Kuzubas, Yildiz, 2004.

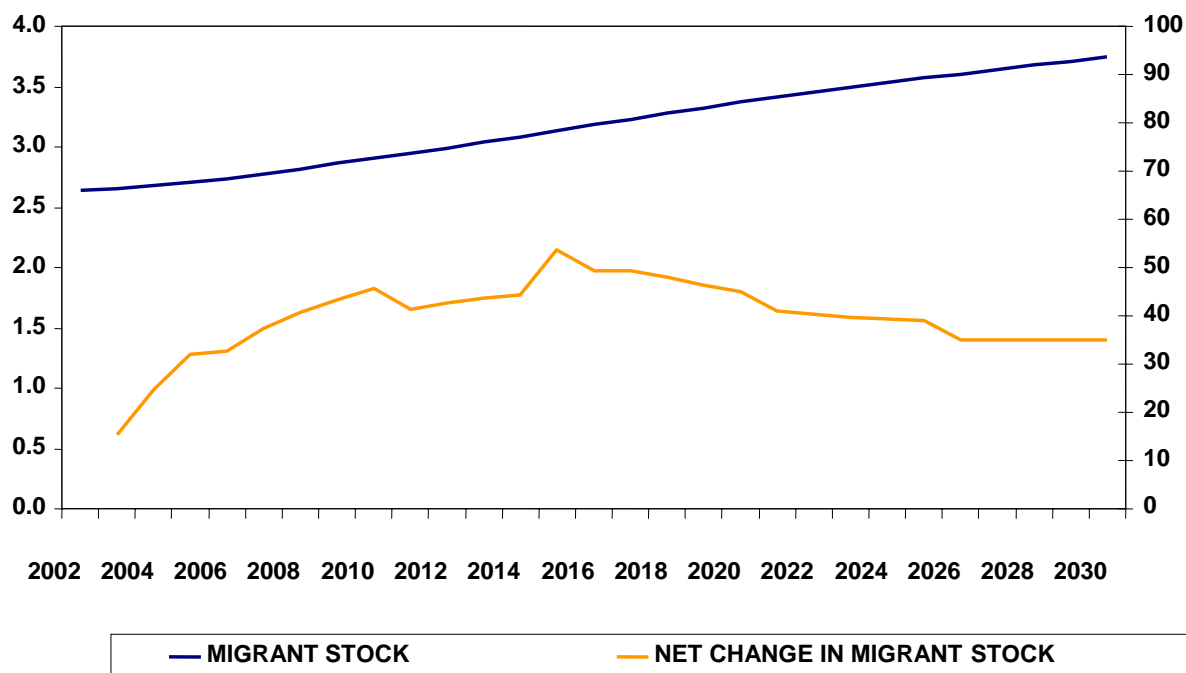
Germany included a very high number of immigrants, equal to approximately 76% of all Turkish immigrants in the EU at the time of the research. Based on this fact and assuming that other EU countries will have the same ‘pull’ effect as Germany, migration estimations for Germany will represent the case for the EU15 as well⁸⁴. In order to arrive at higher immigration numbers, two simulations were made assuming that the restrictions on labor mobility between Turkey and the EU would be abolished in 2015.

The first simulation uses the FREE dummy and thus follows the experience of EU member states with free movement of labor. Differently, the second simulation uses the GUEST dummy thereby following again the experience of EU members and of Turkey itself but with guest worker agreements until 1973.

Under the assumption that Turkey will become EU member and labor mobility restrictions will be removed in 2015, the simulation based on migration experiences of 19 European countries rendered a smooth curve for Turkish migrants (see Figure 16). The net change in the Turkish migrant stock would increase until 2015 but then start to decline, so that in 2030 the migrant stock would reach 3.750.000 people with a net change of 1.073.000 people.

⁸⁴ Erzan, Kuzubas, Yildiz, ‘Growth and Immigration Scenarios for Turkey and the EU’, 2004.

Figure 16: Migrant Stock (in millions) and Net Change in Immigrants (in thousands) in ‘All Europe’ Sample with FREE Dummy

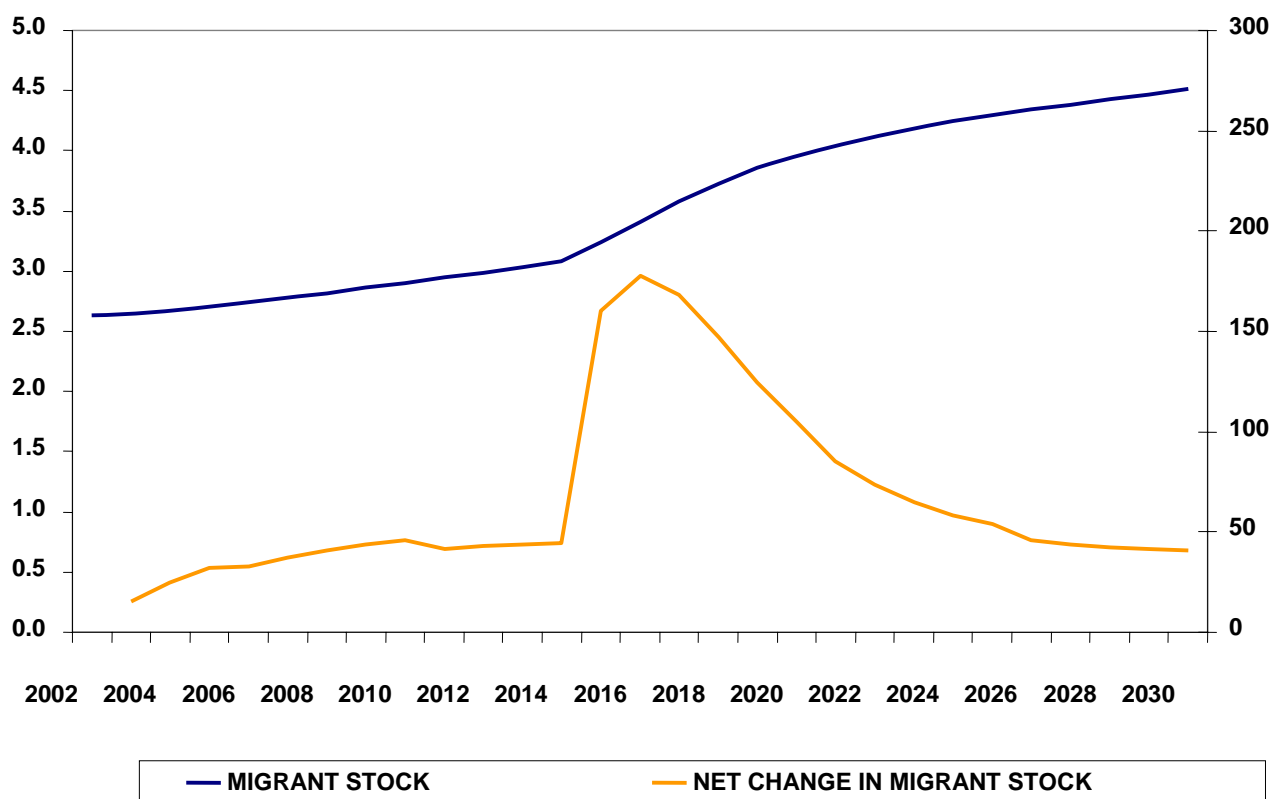


Source: Erzan, Kuzubas, Yildiz, 2004.

In the second case, when the guest worker agreement scenario was simulated, there was a significant jump on migration flows in 2015 (Figure 17). However, the net change in the Turkish migrant stock did not reach a considerably high level. This scenario was characterized as an accession period without efficient structural adjustments and integration⁸⁵.

⁸⁵ Erzan, Kuzubas, Yildiz, ‘Growth and Immigration Scenarios for Turkey and the EU’, 2004.

Figure 17: Migrant Stock (in millions) and Net Change in Immigrants (in thousands) in ‘All Europe’ Sample with GUEST Dummy



Source: Erzan, Kuzubas, Yildiz, 2004.

Table 11: Comparison of the Simulations with the Reference Group ‘All Europe’

Net Change in the Turkish Migrant Stock	2004-2015	2015-2030	Total
Scenario FREE	460.000	613.000	1.073.000
Scenario GUEST	564.000	1.274.000	1.838.000
Turkish Migrant Stock	2004	2015	2030
Scenario FREE	2.675.000	3.140.000	3.750.000
Scenario GUEST	2.700.000	3.250.000	4.500.000

Source: Erzan, Kuzubas, Yildiz, 2004.

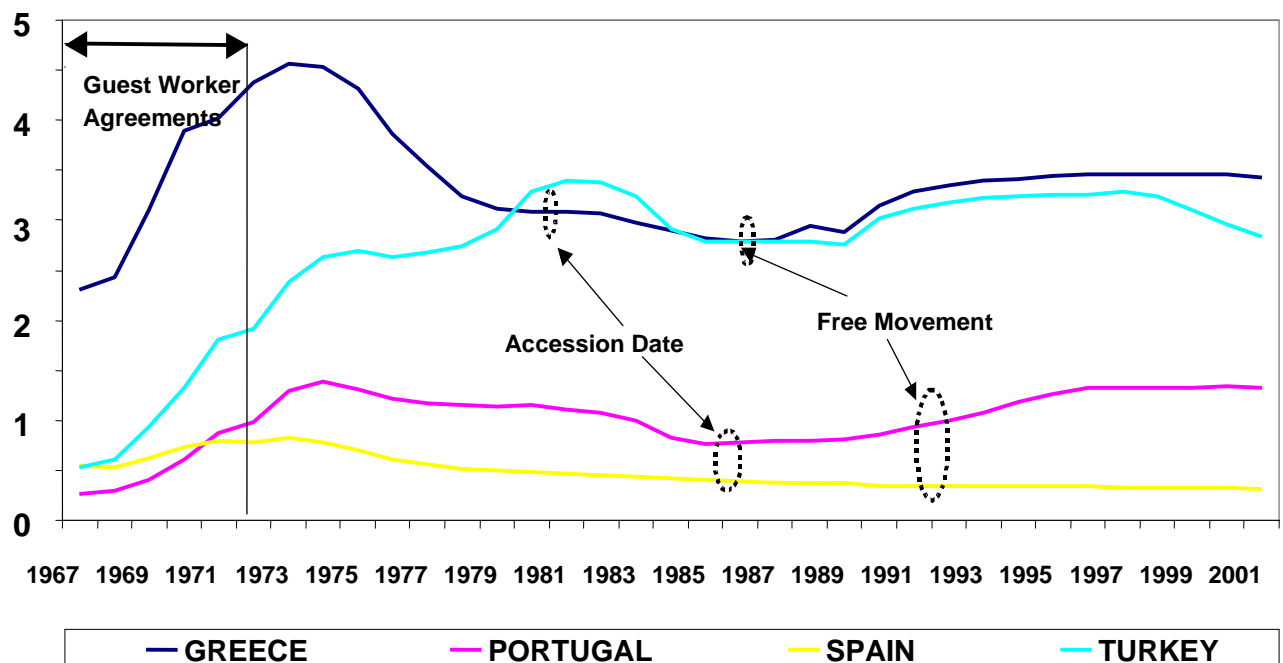
Table 11 compares the (net change in) the Turkish migrant stock in both free movement and guest worker scenarios.

The free labor mobility scenario reflected the socioeconomic enhancements in the countries of accession, which reduced the migration flows. The enhancements included beside higher incomes and more job opportunities also improved social security, health, and education as well as reduced regional inequalities. Thus, as the movement of labor became easier, the migration pressure became less significant.

4.5.2. Scenario 2: Simulation Based on Migration Experiences of Southern ‘Cohesion’ Countries – Spain, Portugal and Greece

The three southern European countries - Spain, Portugal and Greece - were chosen as another reference group because of the similarities of their characteristics to Turkey at the time of their EU accession. The figure below illustrates the immigration experiences of these countries and of Turkey to Germany.

Figure 18: Migrants in Germany as Percentage of Source Country Population



Source: Erzan, Kuzubas, Yildiz, 2004.

The number of migrants was taken as the percentage of the population of source countries. It can be observed that during guest worker agreements, there was a drastic increase in migration flows. When free movement of labor was introduced, the number of Spanish immigrants continued to decrease as before. Differently, the number of Greek and Portuguese

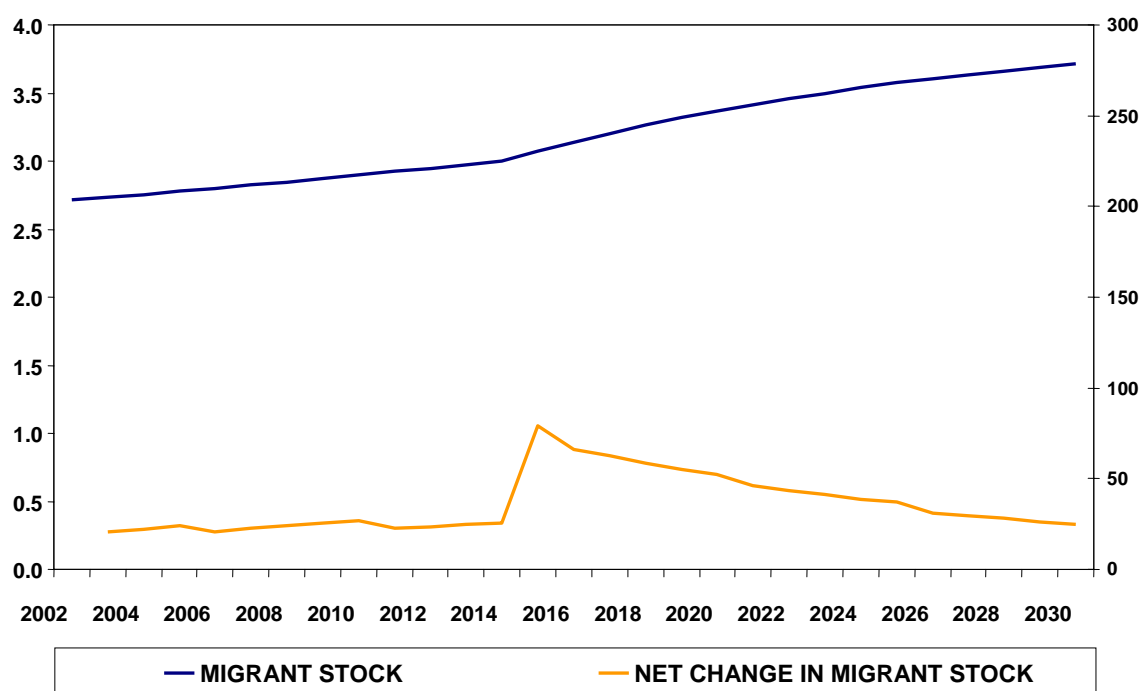
immigrants increased first, but then started to decline as well. The continuing fall in immigrant stocks in recent years imply reverse net migration⁸⁶.

The decrease in the Turkish migrant stock is a result of naturalization. The number of naturalized migrants, which was below 1.000 annually until 1984, almost doubled in the period between 1984 and 1990⁸⁷. However, in the 1990s, there was a continuous increase in the Turkish migrant stock.

Using new estimation results for migration coefficients, the two simulations with free labor mobility and guest worker agreements were made again. In both cases, it was assumed that Turkey would continue its high growth described in Table 8. Furthermore, the results for Germany were extrapolated to the EU15 based on the distribution of migrants in the EU15.

The results of the first simulation were similar to those of the ‘All Europe’ simulation (see Figure 19). The migrant stock followed a smooth curve upwards, whereby there was a jump in the net change of the migrant stock in year 2015. The total change in the migration stock until 2030 did not exceed 1 million people (see Table 12).

Figure 19: Simulation of Free Labor Mobility Based on Migration Experiences of Southern ‘Cohesion’ Countries – Migrant Stocks (in millions) and Net Change in Migrant Stock (in thousands)



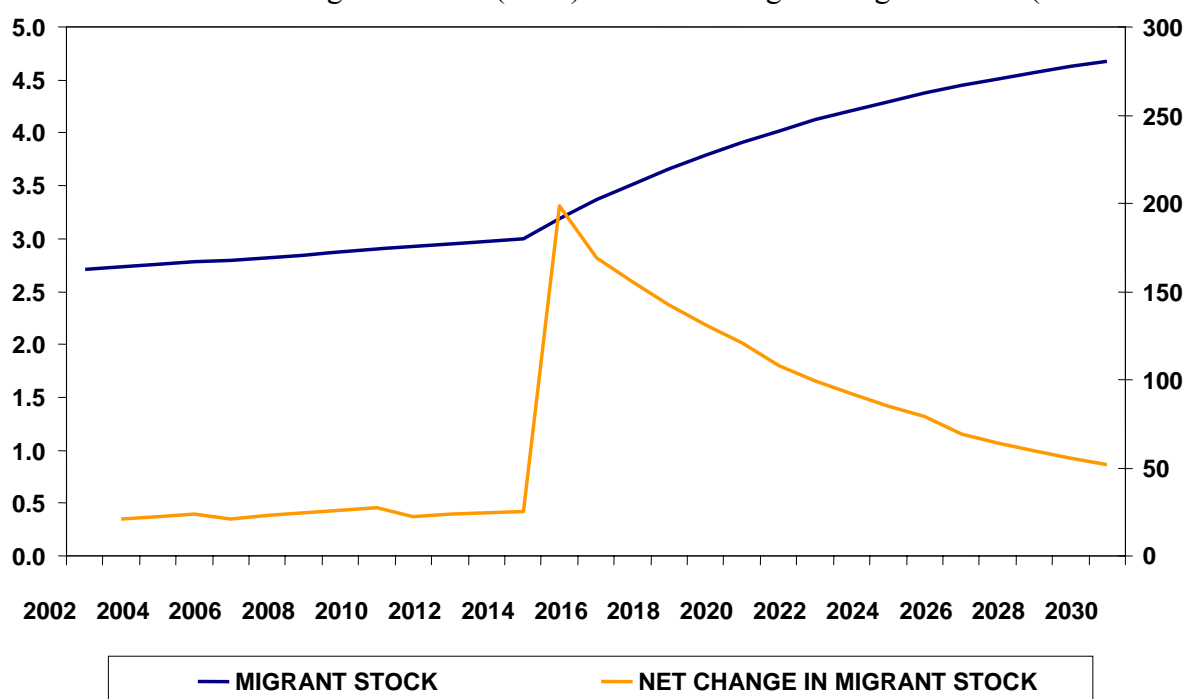
Source: Erzan, Kuzubas, Yildiz, 2004.

⁸⁶ Erzan, Kuzubas, Yildiz, ‘Growth and Immigration Scenarios for Turkey and the EU’, 2004.

⁸⁷ Erzan, Kuzubas, Yildiz, ‘Growth and Immigration Scenarios for Turkey and the EU’, 2004.

The second simulation, on the other hand, led to the outcome that the net change in the migrant stock was enormously high around the year 2015. It eventually normalized but the total net migration doubled the amount in the former simulation, where the actual experience of the southern European countries with free labor mobility had been assumed (see Table 12). Hence, in the guest worker scenario, the total Turkish migrant stock reached 4.6 million.

Figure 20: Simulation of Guest Worker Scenario Based on Migration Experiences of Southern ‘Cohesion’ Countries– Migrant Stocks (in m.) and Net Change in Migrant Stock (in thousands)



Source: Erzan, Kuzubas, Yildiz, 2004.

Table 12: Comparison of the Simulations with the Reference Group ‘Southern Europe’

Net Change in the Turkish Migrant Stock	2004-2015	2015-2030	Total
Scenario FREE	320.000	640.000	960.000
Scenario GUEST	440.000	1.480.000	1.920.000
Turkish Migrant Stock	2004	2015	2030
Scenario FREE	2.755.000	3.075.000	3.715.000
Scenario GUEST	2.755.000	3.195.000	4.677.000

Source: Erzan, Kuzubas, Yildiz, 2004.

4.5.3. Scenario 3: Simulation Based on Turkey's Own Migration Experience as the Only Reference

Another significant part of the simulations made by Erzan, Kuzubas and Yildiz was based on Turkey's own migration experiences in the period between 1967 and 2001. Differently from the previous scenarios, the coefficients reflecting income and employment disparities as well as the INTERVENTION (referring to the 1980 military coup) and INSURGENCY (referring to the 1990-1994 terror) dummies were of major importance⁸⁸. That the absolute values of income and employment coefficients are bigger can be explained through the fact that Turkey has not experienced the socioeconomic transformation which current EU member states have had in their accession periods.

For the period between 2004 and 2030, migration projections were made and adjusted to the EU15. Differently from the previous two scenarios, the estimations of coefficients in this case did not include any EU membership or free labor movement experience of Turkey but the guest worker agreement of the 1960s until 1973⁸⁹.

4.5.3.1. 2004-2030 Forecast: EU Membership, High Growth and Free Movement of Labor

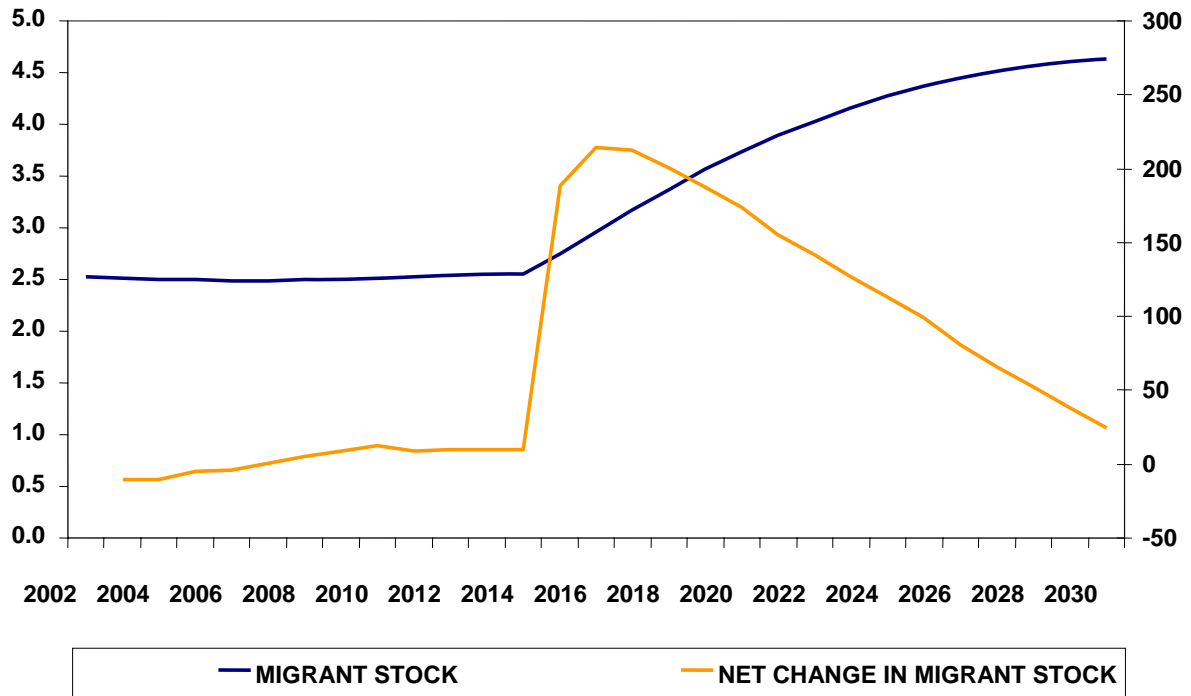
In the first simulation of this part, the high growth scenario for Turkey illustrated in Table 8 was preserved again. It was assumed that after a successful accession period, Turkey will become EU member and in 2015, free labor mobility will come into force. Since until today labor mobility of Turkish workers (to Germany) was only arranged by guest worker agreements, free labor movement was simulated as a repetition of this experience⁹⁰.

⁸⁸ Erzan, Kuzubas, Yildiz, 'Growth and Immigration Scenarios for Turkey and the EU', 2004.

⁸⁹ Erzan, Kuzubas, Yildiz, 'Growth and Immigration Scenarios for Turkey and the EU', 2004.

⁹⁰ Erzan, Kuzubas, Yildiz, 'Growth and Immigration Scenarios for Turkey and the EU', 2004.

Figure 21: EU Membership Forecast Based on the Guest Worker Episode



Source: Erzan, Kuzubas, Yildiz, 2004.

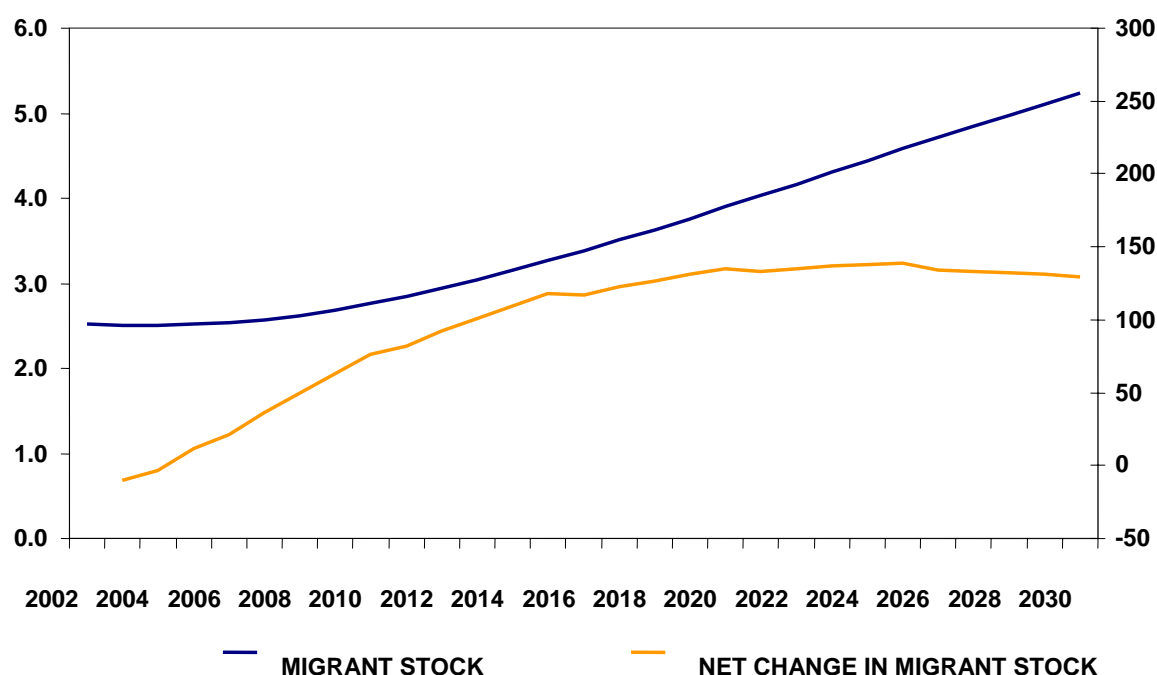
As it can be observed in Figure 21, in case of EU membership, there will be a high jump in the net change of the immigrant stock around the year 2015, which gradually will fall. After 2015, the migrant stock will increase continuously and reach 4.6 million by 2030 (see Table 13). This amount exceeds the simulation result of the guest worker scenario based on the Southern European experience.

4.5.3.2. 2004-2030 Forecast: Suspended EU Accession, Lower Growth and No Free Movement of Labor

The second and last simulation bases on the assumption that Turkey's accession to the EU will be suspended, growth will be lower and work force will not be granted free mobility. It is assumed that urban GDP will grow at an annual rate of 4%, the productivity increase will be 1.5% and rural GDP will stagnate. The unemployment rate will increase, the average urban and rural unemployment rate being 17% and 22% in 2015 and 2030, respectively. Migration flows will decrease these values to 16% and 19%, respectively⁹¹.

⁹¹ Erzan, Kuzubas, Yildiz, 'Growth and Immigration Scenarios for Turkey and the EU', 2004.

Figure 22: Suspended EU Membership Forecast with Labor Mobility Restrictions Based on Turkey's own Experience



Source: Erzan, Kuzubas, Yildiz, 2004.

Table 13: Comparison of the Scenarios Based on Turkey's Own Experience

Net Change in the Turkish Migrant Stock	2004 - 2015	2015 - 2030	Total
High Growth – Membership – Free Movement of Labor	246.000	1.888.000	2.134.000
Lower Growth – No Membership – No Free Movement of Labor	760.000	1.974.000	2.734.000
Turkish Migrant Stock	2004	2015	2030
High Growth – Membership – Free Movement of Labor	2.499.000	2.745.000	4.633.000
Lower Growth – No Membership – No Free Movement of Labor	2.506.000	3.267.000	5.241.000

Source: Erzan, Kuzubas, Yildiz, 2004.

In case of suspended EU accession, current visa regulations will remain preventing significant jumps in the migrant stock. Nevertheless, there will be factors such as low growth in income values and deteriorating domestic labor market which will increase the migration pressure. In this case, the number of migrants going to EU countries will be higher, the net migration flow by 2030 being higher than 2.7 million. In this case, the total Turkish migrant stock will reach its highest number in these simulations – 5.2 million. A comparison of the simulations based on Turkey's own experience is available in Table 11.

The outcome of the simulations illuminates that in case of losing the EU membership prospect; Turkey's migration potential will be higher in spite of the strict labor movement regulations. This situation can be explained with several causes⁹²:

The first reason is that political stability as well as inflow of foreign savings is crucial for sustaining high growth rates in Turkey. In the absence of the EU prospect, it seems to be highly difficult to achieve sustainable growth that will be able to tackle the unemployment problem.

The second major reason is that the sensitivity of migration to income and unemployment disparities would be much higher. This argument is supported by the coefficients for income and employment differentials, which have significantly higher values in the scenario based on Turkey's own experience and thus are strong incentives for migration.

Thirdly, based on the current experiences, it can be argued that the existing visa regulations of the EU and the absence of labor movement provisions between Turkey and the Union cannot prevent migration. A large share of Turkish migrants either moves to Europe with their family or forms a family in the country of destination. The existence of different types of links between Turkey and European countries such as education, investment, trade and tourism makes it difficult for the EU to keep migration flows under control.

Last but not least, the possible occurrence of political instability in Turkey will have a serious effect on migration flows, but was not included in the migration projections. Based on the significant values of the INTERVENTION and INSURGENCE dummy variables referring to the 1980 military coup and terror during the 1990s, respectively, it can be foreseen that political chaos and security problems will result in waves of migration. Political as well as economic deterioration in Turkey will increase migration flows, on the one hand, and reduce return migration, on the other.

⁹² Erzan, Kuzubas, Yildiz, 'Growth and Immigration Scenarios for Turkey and the EU', 2004.

It must be added that the ageing of the Turkish population will significantly decrease migration. A comparison between different age groups shows that the propensity to migrate strongly differs. It is the very young who have a tendency to migrate while people of the age of 55 and above very rarely change place⁹³. Taking the demographic development predictions for Turkey into account; Erzan, Kuzubas and Yildiz came to the conclusion that the migration forecasts (for the period until 2030) should be decreased by approximately 300.000.

4.5.4. Forecast of the Economic Effects of Migration from Turkey towards the EU for 2025 depending on the Migrants' Skill Level

In a simple migration model made in Chapter 4.4.1., it could be observed that migration leads to lower wages and to higher unemployment in the country of destination. Changing some assumptions in the model, such as increasing the employment rate in the country of destination or increasing the unemployment risk for migrants, does not change the basic conclusion of the model.

Nevertheless, labor, which is one of the two factors of production like capital, must be differentiated according to criteria such as training, education and experience. In other words, the impact of migration on social welfare as well as on income distribution differs according to the skill composition of the migrants⁹⁴.

As it was the case with Turkish workers migrating to Germany in the 1960s, effects of migration become highly beneficial on native labor and capital if the migrating labor force complements rather than substitutes the native work force. In the case, when Turkish migrants were largely unskilled and German natives skilled, the former contributed to raise the productivity and wages of natives⁹⁵.

Based on assumed migration flows, Lejour forecasts the economic implications for the year 2025. Borjas (1999) also states that the economic implications of migration for both the countries of destination and of origin depend on the skill level of people⁹⁶. Nevertheless, it is uncertain in which ratio skilled and unskilled people will immigrate. Therefore, Lejour provides two different simulations: In the first one, the composition of the (2.7 million estimated) Turkish immigrants corresponds exactly to the composition of EU workers. In the second simulation, it is assumed that all migrants are unskilled.

⁹³ According to a study by Hacettepe University, Ankara, jointly with the Netherlands Interdisciplinary Demographic Institute (NIDI) and Eurostat (2000) from Erzan, Kuzubas, Yildiz, 2004.

⁹⁴ Flam, 'Turkey and the EU: Politics and Economics of Accession', 2003, <http://www.iies.su.se>, p.12.

⁹⁵ Flam, 'Turkey and the EU: Politics and Economics of Accession', 2003, <http://www.iies.su.se>, p.12.

⁹⁶ Lejour, 'Turkish EU Membership: Institutional Reforms Determine the Size of Economic Benefits', 2004.

Table 14 illustrates the economic effects of migration from Turkey under the assumption of same skill composition in all countries. According to the simulation data, migration will reduce overall Turkish GDP by 2.2%. However, since the reduction in GDP is smaller than the population outflow, GDP per head will increase. As capital is not perfectly mobile across borders, the lower supply of work force will augment the capital-labor ratio in Turkey (Lejour, 2004, p.144). This will raise the marginal product of labor as well as the wages.

Table 14: Economic Effects of Migration for the Year 2025 Under Assumption of Same Skill Composition in all Countries

	Population (%)	Volume of GDP (%)	GDP per capita (%)	Consumption per capita (%)	Wage ratio (unskilled/skilled)
Turkey	-3.1	-2.2	0.9	2.5	0.1
EU15	0.7	0.7	-0.0	-0.2	0.0
Germany	2.4	2.2	-0.1	-0.8	0.0
The Netherlands	0.6	0.6	-0.0	-0.2	0.0

Source: WorldScan Simulations from Lejour, 2004, p.145.

In contrast, migration inflow will decrease GDP per capita in the EU in general, and in Germany and the Netherlands in particular. The lower capital-labor ratio results in a fall in the productivity of labor and in the wages. However, due to the modest increase in the population in these countries, this impact will be only small. In this case, the ratio between the wage of skilled and unskilled workers can be ignored since the composition of migrants was assumed to be identical to the composition in the country of destination⁹⁷.

The implications of migration on the consumption per capita are of different size for Turkey and the EU than on the GDP per capita. On the one hand, the terms of trade are changed. Lower wages in the EU put a downward pressure on producer prices while higher wages in Turkey increase producer prices. The terms of trade are then positive for Turkey expanding consumption. The opposite is valid for the EU. On the other hand, based on past experiences, it is assumed that Turkish migrants living in EU member states provide remittances to their

⁹⁷ Lejour, 'Turkish EU Membership: Institutional Reforms Determine the Size of Economic Benefits', 2004.

home country. This also increases consumption in Turkey while reducing it in the EU countries⁹⁸.

In the second case, where all migrants are assumed to be unskilled, the results will be different. The migration flow changes the skill composition in the EU countries. In Turkey, skilled workers have a larger share in the labor market which increases the average wage as well as the income per capita. The wage ratio between skilled and unskilled workers also changes as the relative scarcity of unskilled workers remaining in their home country affects their wage positively (by 2.5%). Compared to the first simulation, consumption and GDP per capita in Turkey are raised by 0.5%⁹⁹.

Table 15: Economic Effects of Migration of Only Unskilled Workers for the Year 2025

	Population (%)	Volume of GDP (%)	GDP per capita (%)	Consumption per capita (%)	Wage ratio (%) (unskilled/skilled)
Turkey	-3.1	-1.8	1.4	3.0	2.5
EU15	0.7	0.5	-0.1	-0.3	-0.9
Germany	2.4	1.8	-0.6	-1.2	-3.0
The Netherlands	0.6	0.5	-0.1	-0.3	-0.7

Source: WorldScan Simulations from Lejour, 2004, p.146.

Oppositely, the wage of unskilled workers in the EU falls in relation to that of the skilled. In Germany, which receives the largest migration flows among all EU member states, the wage ratio decreases by 3%. GDP as well as consumption per capita become lower but the macroeconomic effects are rather small for EU15.

⁹⁸ Lejour, 'Turkish EU Membership: Institutional Reforms Determine the Size of Economic Benefits', 2004.

⁹⁹ Lejour, 'Turkish EU Membership: Institutional Reforms Determine the Size of Economic Benefits', 2004.

5. CONCLUSION AND ASSESSMENTS

This master's thesis was mainly concerned firstly with macroeconomic and sectoral aspects of Turkey's international trade performance, secondly with macroeconomic policies and lastly with implications of Turkish EU membership on migration flows.

In the international trade performance, considerable improvements have been achieved in recent years due to new macroeconomic policies, expansion of the Customs Union to the new EU member states as well as increased FDI attraction potential. The private business sector has become stronger and more resistant to factors such as political instability, macroeconomic shocks and regulatory and institutional uncertainties owing to the liberalization efforts after 1980, macroeconomic stabilization and structural reforms made after the 2001 crisis.

The most important challenges to the business sector have been increased international competition and real currency appreciation that have led to different performances in different sectors. In the past two decades, industry has been the 'winner' and agriculture the 'loser'. Although the latter has a much smaller percentage in the commodity composition of export goods, it is providing a large share of jobs.

Moreover, because of exchange rate fluctuations, from 2000 on, exporting firms had lower profit margins whereas those with domestic sales made increasing profits. Additionally, labor-intensive industries in export markets were affected more by the competition from low-wage countries than those in the domestic market. The highly competitive sectors with increased output prices, higher labor productivity growth and a rather low wage growth were the car and electronics industries, while Turkey's traditional textile and clothing industry was the declining sector.

In comparison with five new EU member states – Bulgaria, the Czech Republic, Hungary, Romania and Poland – Turkey has a comparative advantage in exporting labor-intensive goods and a comparative disadvantage in imitable research-oriented products. The international competitiveness of Turkey's machinery and transport equipment sectors rose while the textile and clothing industry has been losing. In order to increase Turkey's competitiveness, it is needed to change the foreign trade structure from low-technology products towards technology-intensive and value-added goods.

The second major chapter had its focus on Turkey's fiscal, monetary and banking and exchange rate policies. A tight fiscal policy has been followed. However, fiscal adjustment was based mainly on tax increases as well as investment cuts instead of the rationalization of expenditure. One of the challenges since 2001 was to increase the grade of monetary policy versus that of fiscal policy. On the monetary side, reverse dollarization, surge in capital

inflows and necessity to change the structure of the CBT balance sheet were sources of concern.

The Turkish banking sector has been strengthened to a large extent through restructuring of state-owned banks, prompt resolution of the SDIF (Saving Deposit Insurance Fond) banks, strengthening of private banks and regulatory reforms. Current challenges to the sector are structural weaknesses and some political pressures on the regulation and supervision agency.

Last but not least, the effects of the eventual Turkish EU membership on migration flows were examined. Turkish working-age population has an increasing trend. Moreover, workers are willing to switch from traditional sectors like agriculture to other fields such as industry and services. These facts together with a high unemployment rate in Turkey and need of labor force in the EU will foster migration whereas increased life expectancy in Turkey (and thus the ageing of the population) will decrease the migration pressure to a certain degree.

Large-scale immigration from Turkey to the EU has started already in the 1960s. Despite the fact that immigration policies have gradually become more restrictive in the EU, immigration from Turkey has continued (in a smaller extent) until today. Since international migration is a very important issue in EU-Turkey relations which will also play a role in the final decision of the EU about Turkish membership, several growth and immigration simulations have been discussed in this thesis.

In comparison to simulations based on the migration experiences of (19) CEE countries and three southern cohesion countries (Spain, Portugal and Greece) to the EU, those based on Turkey's own experience have rendered higher results for migration flows. In the latter, the net change in the Turkish migrant stock is expected to be between 2.13 and 2.73 million depending on whether Turkey will become an EU member or not. An EU accession and transition period characterized by high growth and followed by free movement of labor will play a diminishing role on migration pressures.

In a simple migration model, migration leads to lower wages and higher unemployment in the country of destination. Nevertheless, the factor of production 'labor' has to be differentiated according to training, education and experience because the impact of migration on social welfare and income distribution depends on the skill composition of migrants. Namely, the effects of migration become beneficial on native labor as well as capital when migrants complement (rather than substitute) the native work force.

Therefore, priority should be given in the coming years to visa and immigration policies in a way that migration flows will be beneficial for both sides. On the one hand, Turkey's productive population should be better educated and employment should be enhanced. On the

other hand, the EU should make use of Turkey's young potential. German experience shows that the guest worker agreements do not render the best solution. As the joke says, there is nothing as permanent as a temporary migrant. But a 'blue card' suggested by Frattini, Europe's commissioner for justice and home affairs, might prove an efficient solution easing the temporary stay of highly skilled persons and their families.

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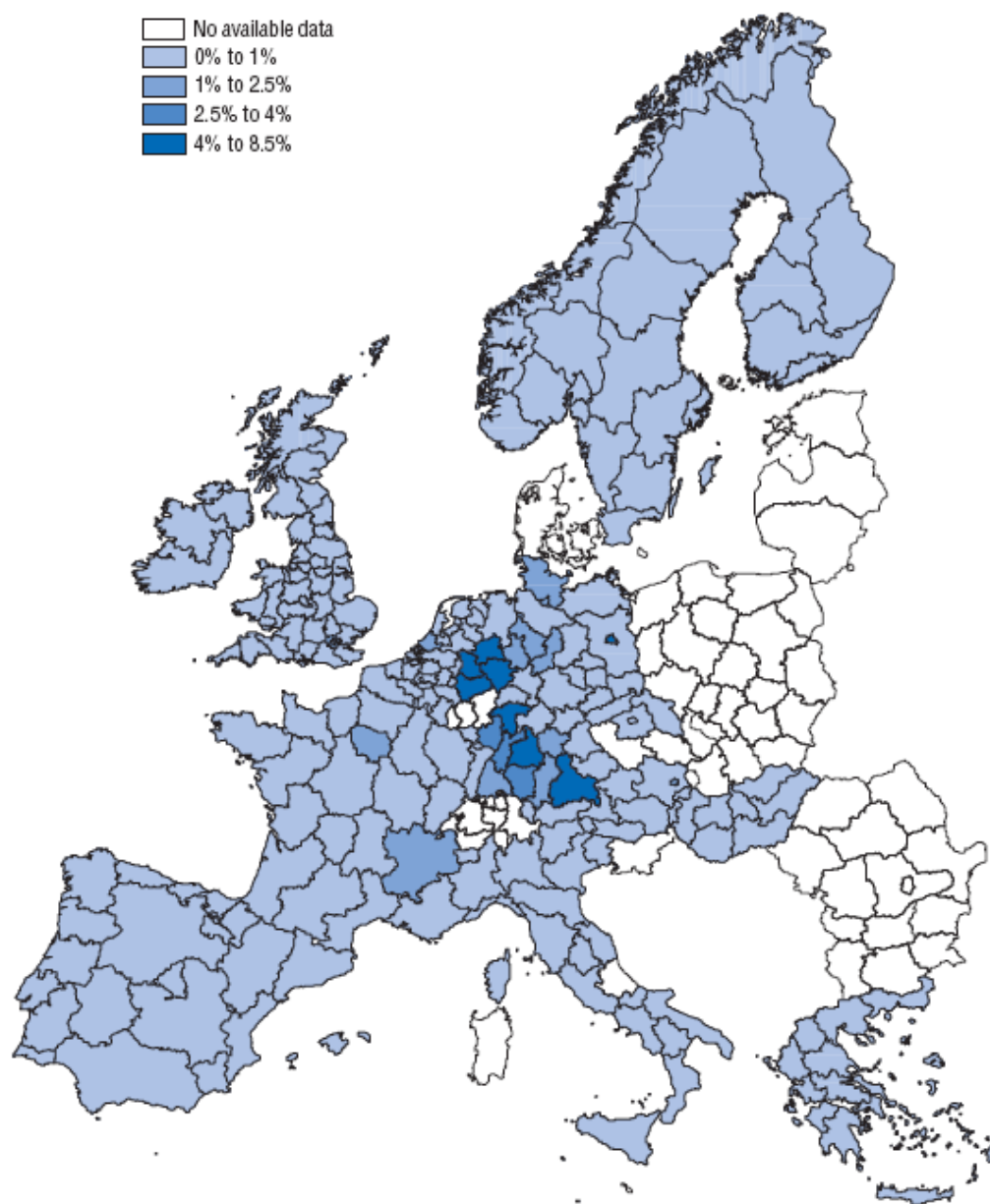
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ANNEX I

Map 1: Distribution of the Turkish Population in the European Regions (2001)

Percentage of the Total Foreign Population by NUTS 2 European Region Level



Source: 'Regional Aspects of Migration' from Trends in International Migration: SOPEMI 2003 Edition, OECD 2004.