A MULTI-PRONGED APPROACH TO LABOR MARKET FLEXIBILITY: A SURVEY ON THE TURKISH CONTEXT

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ABSTRACT

A MULTI-PRONGED APPROACH TO LABOR MARKET FLEXIBILITY: A SURVEY ON THE TURKISH CONTEXT

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Turkish labor market has been experiencing low employment performance over the last two decades. This pessimistic picture has become more striking after the crisis in 2001. While output growth has presented a rapid recovery, unemployment could not record such an improvement and has remained around 10 % since then. This fact has introduced a new phenomenon to Turkey called "jobless growth". As a solution to the bottlenecks in the labor market, the concept of "flexibility" has been more frequently pronounced by policy makers and academicians at both national and international level.

In the light of flexibility-based arguments, this thesis takes an impulse from the basic assertion of the neoclassical theory that it is the labor market rigidities that are mainly responsible for high unemployment/low employment performance. Accordingly, the aim of the thesis is to analyze labor market flexibility with a particular focus on the Turkish context. The discussions conducted throughout the thesis are based on the question; whether Turkish labor market actually includes such considerable rigidities constituting impediment for employment creation, as suggested by neoclassical arguments.

The thesis starts with a review of main characteristics of the labor market in terms of demographic trends, labor force participation, employment and unemployment. Secondly, labor market flexibility is analyzed through two main indicators: labor cost

flexibility and production function flexibility; and these two indicators are divided into six sub indicators. The flexibility indicators covered by the thesis are investigated individually, without an aim of aggregating them into a single indicator. The research involves quantitative findings based on available data and a qualitative survey with reference to related legislation.

Key words: employment creation, jobless growth, labor market flexibility/rigidity, reserve army of labor, structural change process, unemployment.

ÖZ

İŞGÜCÜ PİYASASI ESNEKLİĞİNE ÇOK YÖNLÜ BİR YAKLAŞIM: TÜRKİYE ÖRNEĞİ ÜZERİNE BİR ARAŞTIRMA

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Türkiye işgücü piyasası son yirmi senedir düşük bir istihdam performansı sergilemiştir. Bu karamsar tablo, 2001 krizinden sonra daha da çarpıcı bir hal almıştır. Kriz sonrası dönemde ekonomik büyümede hızlı bir iyileşme görüldüyse de işsizlik oranında aynı gelişme kaydedilememiş ve krizden bu yana işsizlik yüzde 10 civarında bir seyir izlemiştir. Bu durum Türkiye'yi "istihdam yaratmayan büyüme" olarak anılan yeni bir olguyla tanıştırmıştır. İşgücü piyasasındaki darboğazın aşılabilmesi için çözüm önerisi olarak sunulan "esneklik" kavramı, politika yapıcıları ve akademisyenlerce hem ulusal hem de uluslararası düzeyde daha sık telaffuz edilir hale gelmiştir.

Esnekliğe dayalı argumanlara ilişkin tartışmalar ışığında bu tez, neoklasik teoride yüksek işsizliğin/düşük istihdam performansının asıl sorumlusu olarak nitelendirilen "işgücü piyasası katılıkları" temel savından yola çıkmaktadır. Bu bağlamda, tezin amacı, Türkiye örneğini temel alarak işgücü piyasasında esnekliği araştırmaktır. Tez boyunca yürütülen tartışmalar, Türkiye işgücü piyasasının, neoklasik yaklaşımın öne sürdüğü gibi, istihdam yaratmanın önünde engel oluşturacak kadar önemli katılıkları içerip içermediği sorusuna dayanmaktadır.

Tezde ilk olarak, demografik eğilimler, işgücüne katılım oranı, istihdam ve işsizlik gibi işgücü piyasasının temel özelliklerine genel bir bakış sunulmaktadır. İkinci

olarak, işgücü piyasasında esneklik, işgücü maliyetinde esneklik ve üretim fonksiyonunda esneklik olmak üzere iki temel gösterge doğrultusunda incelenmekte, ve bu iki gösterge altı alt-göstergeye ayrılmaktadır. Tezde kapsanan esneklik göstergeleri tek bir gösterge altında toplulaştırma amacı gütmeden ayrı ayrı incelenmektedir. Araştırma mevcut verilere dayanan niceliksel bulguların yanısıra ilgili mevzuata atıfta bulunan niteliksel bir incelemeden oluşmaktadır.

Anahtar Kelimeler: istihdam yaratma, istihdam yaratmayan büyüme, işgücü piyasası esnekliği/katılığı, yedek işgücü ordusu, yapısal dönüşüm süreci, işsizlik.

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LIST OF ABBREVIATIONS

EC	European Community
ECA	Eastern Central Asia
EPL	Employment Protection Legislation
EU	European Union
EUROSTAT	European Union Statistical Institution
GDP	Gross Domestic Product
GNP	Gross National Product
ILO	International Labor Organization
IMF	International Money Fund
LDC	Least Developed Countries
LFPR	Labor Force Participation Rate
LMS	Labor Market Segmentation
MLSS	Ministry of Labor and Social Security
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing Power Parity
SAP	Structural Adjustment Program
SPO	State Planning Organization
SSI	Social Security Institution
TCEA	Turkey Confederation of Employers' Association
TEI	Turkish Employment Institution
TIBA	Turkish Industrialists' and Businessmen's Association
TL	Turkish Liras
TRY	New Turkish Liras
TURKSTAT	Turkish Statistical Institution
UIB	Unemployment Insurance Benefits
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
US	United States

CHAPTER 1

INTRODUCTION

The Turkish economy has experienced a striking performance in terms of growth rates after the 2001 crisis. However, the labor market has not recorded a concomitant recovery. The unemployment rate, which was around 6.5% in 2000, increased to 8.4% in 2001, 10.3% in 2002 and has remained around 10% since then; despite the rapid growth performance across industry and services. The unemployment rate in urban areas has been even higher than the national average by about 3-4 percentage points throughout the period. In short, the post-crisis period of the Turkish economy portrays a picture where high output growth is accompanied with insufficient job creation to reduce unemployment.

The Turkish experience has warranted the label "jobless growth", a term which has previously been introduced by International Labor Organization (ILO) and United Nations Conference on Trade and Development (UNCTAD) to represent the common practice of economic growth not translating into employment creation in many countries (ILO, 2006; UNCTAD, 2006). In this context, ILO (2008) draws attention to the circumstances that the number of people unemployed worldwide has remained at historical high levels despite strong global economic growth, and confirms a trend of the past several years in which robust economic growth has failed to translate into significant reductions in unemployment or poverty among those at work. It is underlined that economic growth does not spontaneously lead to a progress in labor market indicators. Therefore, active engagement to put labor market policies at the centre of macroeconomic agenda is required to make the progress inclusive and sustainable (ILO, 2007). In addition, employment friendly policies including a combination of mutually reinforcing economic, employment and social protection policies are regarded necessary to sustain long-term social stability:

> "It is a clear message of research and global experience that economic development goes hand-in-hand with a stepwise raising of standards, a fair distribution of income and wealth and social inclusion. Instead of following a

> 'low road approach' of reducing labor costs by reducing wages, investment in human resources and labor and social protection, a 'high road' approach to decent work would appear to be more promising. Improving labor and social standards and better economic performance are complementary" (ILO, 2007:2).

The issue is also on the agenda of institutions such as the World Bank and Organisation of Economic Cooperation and Development (OECD). However, looking from a different perspective, the focus is mainly on easing labor market regulations to replace "jobless growth" with "job-rich" growth. OECD in a recent report sheds light on the need for more flexibility for a well-performing labor market (OECD, 2007c). According to the flexibility-oriented approach, the permanent characteristic of unemployment generally stems from the rigidities in the labor market.

The general attitude of policy makers in the Turkish context is not much different from the World Bank perspective either. World Bank (2006), for example, proposes more resilience in labor market regulations for an effective job creation strategy. "The analysis in this study suggests that well-intentioned labor regulations are currently hindering job creation –and ultimately, economic growth. Critical measures include action on severance pay, easing restrictions on temporary employment, and lowering unemployment insurance premiums" (World Bank, 2006: i). It is this critical role attached to flexibility issue that has urged the main motivation for this thesis.

Persistent high unemployment rate is not the only weakness of the Turkish labor market. In point of fact, one of the distinctive charecteristics of the labor market is embodied in the demographic transition through which Turkey has been progressing. According to a projection of TEI (2005) based on OECD surveys, Turkish population which was 72.1 million in 2005 would stabilize somewhere between 95 and 98 million by around 2040. In parallel with the increase in population, working age population (15-64 years) which was 58.1% of total population in 1985, 63.2% in 1995 and 65.7% in 2005 is expected to grow during the same period as well (TEI, 2005). These demographic indicators present that Turkey is more likely to face excessive labor supply as part of the unemployment problem in the foreseeable future, unless the increasing population is absorbed.

Despite an upward trend in working age population, new labor could not be attached to the market. As a result, labor force participation rate (LFPR) has decreased throughout the years. With approximately a drop of 10 percentage points, the rate has decreased to 47.8% in 2007 from 57.5% in 1988. One of the reasons of this declining trend in the LFPR is related with the "structural transition process" in the labor market. This structural transition has implied a marked decline in agricultural employment for the last two decades due to mechanization, removal of agricultural subsidies especially after 2000, and accordingly migration towards cities (World Bank, 2006). A high percentage of labor force participates in low-productive activities in agriculture not requiring any special skill, in contrast to the activities carried out in urban areas. Urban economy is more selective with limited employment opportunities, thus most of the unskilled agricultural workers, mostly women, are excluded from labor market in urban areas because of their adjustment difficulties. The discouraged effect on female labor is clearly observed from the comparison with OECD countries. Turkey has the lowest female participation rate with 26.7%, as opposed to an OECD average of 60.8% in 2006 (OECD, 2007c).

To sum up, the structural change process partly accounts for the poor performance of Turkish labor market since 1980s. As low productivity is the main characteristic of agricultural employment, high demand for low skilled jobs in urban areas will result in serious unemployment problem given the low employment creation capacity of the cities especially in the field of low skilled jobs. Unemployment is rather a problem in urban areas especially for women, because of the typical features of rural employment indicated above. In this regard, services sector is likely to play a much more important role to absorb surplus labor coming from agriculture in the following years. Such a workforce flow towards cities creates another threat that many low skilled surplus labor tend to look for work in informal sector instead of becoming unemployed.

In the existence of such enduring problems in the Turkish labor market, we have been observing that higher and higher importance being attached to flexibility by

employers, by governments and by major international organizations to solve out the problem of low employment performance:

> "As in other semi-industrialized countries, issues surrounding the labor market have been one of the most severely neglected areas of the Turkish planning and policy-making framework. … no consistent and detailed policy framework has been developed to cope with the growing labor market pressures as characterized by the familiar problem of the pace of employment creation falling drastically short of the rapid growth of population and labor force. Instead, most of the attention has centered around institutional aspects of the labor market dominated by trade unions and the interventionist state oscillating between liberalism and authorianism" (Şenses, 1994: 406).

Turkey is not the only country where flexibility arguments have recently gained much strength. More flexibility has been suggested to many countries as a remedy to overcome the bottlenecks in the labor market. International institutions such as the International Money Fund (IMF), OECD and the World Bank, have submitted a standard recipe to the economies, which suggest easing labor market regulations to increase employment creation capacity. These institutions relate the success of labor markets to their flexibilities, and poor employment performance of the economy to their rigidities (Onaran, 2002; Sengenberger, 2006).

In the light of the debate on the flexibility-based arguments, the thesis takes an impulse from the basic assertion of the neoclassical theory that it is the labor market rigidities that are mainly responsible for low employment performance. Accordingly, the aim of this thesis is to investigate whether labor market in Turkey is actually (relatively) in/flexible. To this end, this thesis takes a comprehensive framework and analyzes a set flexibility indicators to determine the rigidities in the Turkish labor market. A comprehensive framework is considered essential since labor market rigidities have been attached such a crucial role by neo-classical theory in explaining the link to unemployment problem. As a result, it becomes important to assess the validity of these neoclassical arguments in Turkey.

In order to understand to what extent those arguments hold in Turkey, the stringency of the labor market is examined via an overview of historical records of the (sub)indicators (subject to data availability) and through a comparative analysis

between the previous (Act No.1475) and the current Labor Acts (No.4857)[1]. Historical (time series) records of each indicator defined, are overviewed and deciphered in the Turkish context. In addition, analysis on the relative stringency of Turkish labor market is conducted in comparison with the OECD countries. Carrying out such an analysis calls for discussions of alternative theories such as Marxian reserve army of labor hypothesis and labor market segmentation theory, where relevant.

With the multi-pronged approach it utilizes, this thesis intends to fill a gap in the research field of labor market flexibility for the case of Turkey. Studies concerning the concept of flexibility in the Turkish labor market have generally focused on one aspect such as; wage flexibility (i.e. Onaran, 2002), nonwage flexibility (i.e. Turkey Confederation of Employers' Association (TCEA), 2004) or flexibility in employment protection legislation (i.e. Taymaz and Özler, 2004). However, this thesis surveys different aspects of labor market flexibility in a comprehensive manner, including but not necessarily limited to individual aspects. This wider-focused survey based on several (sub)indicators should enable one to determine areas where labor market rigidities exist at the micro level. In this way, this thesis provides important findings about the specific areas in the labor market involving such rigidities that hinder employment creation. In addition, the thesis is considered important as it lays the groundwork for us to assess the soundness of flexibility arguments in terms of the investigated (sub)indicators.

One of the most appropriate empirical studies that develop a comprehensive framework for the labor market flexibility is conducted by Monastiriotis (2003). Inspired by Atkinson (1984), Monastiriotis analyzes labor market flexibility in the UK region in terms of three main indicators: labor cost flexibility, production function flexibility and supply side flexibility. This thesis focuses on the first two, the labor cost flexibility and the production function flexibility, in the Turkish

[1] In doing so, this thesis intends to comprehend whether there is a tendency towards flexibility in legislation after enforcement of the new Labor Law and analyzes the coverage of the flexibility issues in the current legislation. Note that it would be misleading to make an evaluation by only examining the legislation given the existence of informal sector where regulations do not work.

context. As far as data is available, the sub-indicators are analyzed by using time-series data; if not, the analysis is confined to a survey of related legislation.

The thesis is organized under five chapters, including this introductory one. Chapter 2 provides an overview of the main characteristics of the Turkish labor market in terms of demographic trends, labor force participation, employment and unemployment. Chapter 3 presents an analysis of the soundness of the flexibility arguments in the Turkish context in terms labor cost flexibility. For this purpose, the indicators concerning labor cost flexibility are examined on an empirical basis through four sub indicators: wage flexibility, non-wage cost flexibility, unemployment flexibility and union flexibility. In the 4th chapter, the second component of labor market flexibility, production function flexibility is analyzed in terms of internal and external sides of numerical flexibility. Finally, chapter 5 summarizes and concludes.

CHAPTER 2

MAIN CHARACTERISTICS OF THE TURKISH LABOR MARKET

2.1. Introduction

This chapter describes main features of the Turkish labor market on the basis of four components; demographic trends, labor force participation, employment and unemployment. An overview of these elements helps us to point out the frailty of the labor market and to comprehend the recently introduced phenomenon of the so-called "jobless growth". Actually, introducing main factors behind the poor performance of the labor market becomes more critical as it is almost impossible to evaluate flexibility in the labor market without any information about its structure. In this regard, labor market flexibility indicators are examined with reference to those four components.

Depending on data availability, the discussions in this and the following chapters are held on the basis of quantitative analysis. The main sources of national data are Turkish Statistical Institute (TURKSTAT), State Planning Organisation (SPO), Ministry of Labor and Social Security (MLSS), TCEA and TEI. Given the inconsistency of data from different sources at times, one should be cautious in assessing the statistical findings. First of all, there are considerable differences between statistics supplied by national and international sources. In order to minimize the data inconsistency problem, I prefer to rely on OECD data in making international comparison. Moreover, I also rely on international sources if the required statistics are not published by national sources.

There are also significant differences in statistics published by different national instutions. One implication of this basic problem is non-accession to a uniform time-series extending back to 1970s. The series used in this thesis are constructed by compiling statistics (usually before and after 1988) published by various official

bodies. However, such a practice reduces the quality and the reliability of the data as they are mostly based on different calculations or definitions. The reliability problem also exists for the post-1988 period, especially for the data concerning industrial relations. MLSS publishes the related statistics, however, the calculation it adopts seems to lead to an overestimation of unionization rates, since the rates do not show consistency with those published by other official bodies such as the trade unions (Koç, 1997). Last but not the least, many statistics are hardly accessible For instance, sound statistics concerning atypical employment arrangements could not be obtained; very limited statistics available, display symptoms of underestimation since they lack any regularity with the large size of informal employment.

2.2. Demographic Trends

Turkey has been progressing through a demographic transition process in which population growth has an upward trend with a low pace. Annual growth rate of population was at an average of 1.83% between 1990 and 2000; it decreased to 1.35% in 2004. According to a projection of TEI (2005) based on OECD surveys, Turkish population which was 72.1 million in 2005 would stabilize somewhere between 95 and 98 million by around 2040. In parallel, working age population (15-64 years) was 62.1% of total population in 1987. This ratio has increased to 68.9% in 1997, 71.4% in 2007 and it is expected to grow throughout the forementioned period. Likewise, a survey by Ercan and Tunalı (1997) estimate that the 20-54 age group of the population will account for 50% or more of the total between 2000-2030. This picture depicts that employment generation issue will continue to be on the agenda in future.

On the other hand, according to another projection based on the evolution of the age structure of the population, Tunalı (2003) states the share of the youth (0-19 years) would decrease from 35% to 26% between 1990 and 2010. This figure is important to imply that children are likely to stay in school longer and teenage workers will probably constitute a smaller share of the labor force.

The demographic transition has been accompanied by increasing urbanization such that the share of urban population rose from around 25% in 1950 to 57.3% in 2000 and it is expected to reach around 80% by 2050. Since the fertility and the natural population growth rates in urban areas (calculated as the difference between birth rate and death rate) tend to be lower, the main cause of the rise in urban population probably comes from internal migration (World Bank, 2006). In this context, the gap between urban and rural population and the trend over the period may serve as an indicator to denote the correlation between the trends in urban population and urbanization rate. Urban population increased from 25% in 1950 to 62.7 % in 2006, whereas rural population share decreased from 75% to 37.3% between 1950 and 2006 (SPO, 2007).

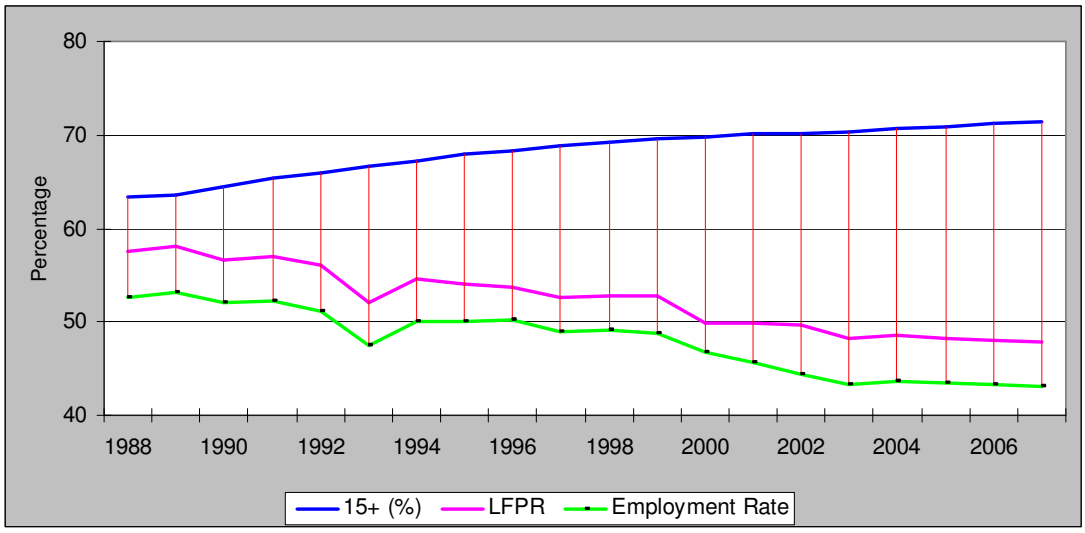
In conclusion, unless the increasing population of the young and the migrants are absorbed, Turkey is more likely to face excessive labor supply as an unemployment problem. Such demographic trends make Turkey obliged to create new jobs over time for a growing working-age population especially in urban areas in order to avoid an increases in unemployment rates.

2.3. Labor Force Participation

Labor force participation rate, defined as percentage of working age population that is either employed or unemployed but looking for a job, has presented a downward trend for the last two decades. This is because the gap between working age population and labor force participation has widened. Working age population rose by around 20 million individuals between 1988 and 2007 and reached to 49.2 million, whereas the number of people attached to the labor force increased to 23.5 million in 2007 with a growth of 4-million since 1988. As a result, working age population rate increased from 63.3% in 1988 to 71.4% in 2007, and LFPR decreased from 57.5% to 47.8% (Figure 1). This figure implies that only about one-fourth of the working age population could be attached to the labor market over the period.

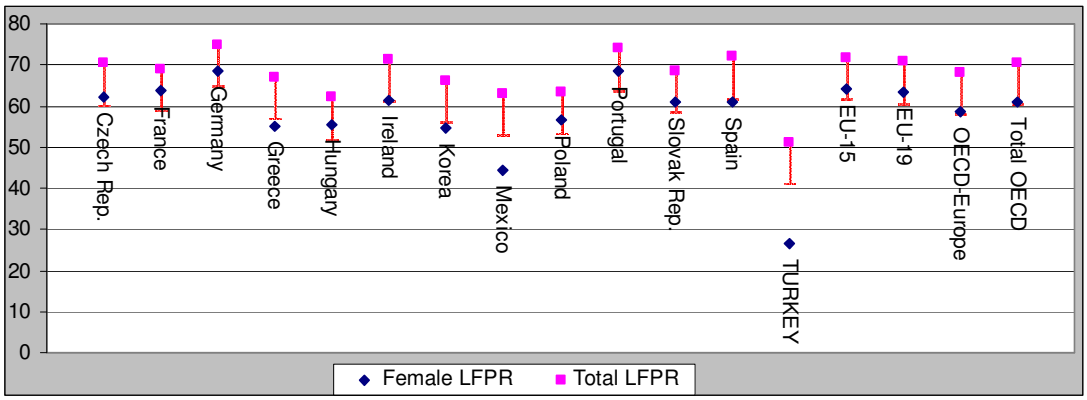
Figure 2 compares Turkey with other middle income OECD countries and a couple of developed OECD countries with similar unemployment rates such as Germany and France. Among all the countries in the figure, Turkey has the lowest participation rate with 51.1% in 2006. This figure is 20 percentage points below the OECD average. Hungary, with a participation rate of 62%, follows Turkey in the sample. The gap between Turkey and OECD countries in terms of labor force participation mainly emerges from low participation rate of women but not that of men (World Bank, 2006). The gender gap in Turkey is wider relative to other countries chosen as benchmarks. In terms of the female participation to the labor force, Turkey has the lowest female participation rate with 26.7%; Mexico follows with 44.5%. Whereas male participation rate in Turkey (of 75.5%) was higher than Hungary, Poland and France (with 68.7%, 70.1% and 74.2%, respectively), it was still below the averages of OECD and European Union (EU)-15 (of 80.4% and 79.3%, respectively).

Figure 1. The Gap between the Rates of Labor Force Participation, Employment and Working Age Population: 1988-2007



Source: TURKSTAT, 2008.

Figure 2. Labor Force Participation Rates by Countries, 2006



Source: OECD, 2007c.

Considering the long-run trend of LFPR for the last two decades, Turkey is the only country experiencing a huge drop by approximately 10 percentage points. Hungary and Poland also experience decreases in the LFPRs, with values much lower than that of Turkey. One of the reasons of this declining trend in the LFPR is regarded as movement out of agriculture, and accordingly migration towards urban areas with lower average participation rate[2].

Women are rather adversely affected from this process relative to men, because majority of the labor force employed in agriculture are unskilled, unpaid female workers. A high percentage of labor force participates in low-productive activities in agriculture. In contrast to the activities carried out in urban area, these activities do not require any special skill. Urban economy is more selective and has high-skill requirements with limited employment opportunities. Thus most of the unskilled agricultural workers, mostly women, are excluded from labor market in urban areas because of their adjustment difficulties[3] (Bulutay, 1995; Özyıldırım and Togan, 1997; World Bank, 2006).

[2] This issue is comprehensively discussed in the next section.

[3] It is undoubtful that men also face difficulties with skill adjustment problems. However, additional responsibilities of women concerning housework makes it more difficult for them even to spend time for getting new abilities. Low skill endowment of women leaves them out the labor market.

Table 1. Educational Profile of the Labor Force in Turkey, 2007

	TOTAL LFPR	MALE LFPR	FEMALE LFPR
Illiterate	19,4	38,0	15,7
Less than Highschool	46,4	70,7	21,3
High and Vocational Highschool	56,7	73,3	31,7
Higher Education	78,6	83,9	70,4

Source: TURKSTAT, 2008.

Table 2. LFPR and Employment Rate by Countries in terms of Educational Levels, 2005

	LFPR			Employment Rate		
	Less than upper	Upper secondary	Tertiary	Less than upper	Upper secondary	Tertiary
Czech Rep.	54,8	80,5	87,5	41,2	75,5	85,8
France	66,0	80,9	86,8	57,8	75,0	81,6
Germany	64,6	79,3	87,7	51,6	70,6	82,9
Greece	63,0	76,9	88,2	57,9	69,6	82,0
Hungary	43,8	74,9	85,0	38,1	70,4	83,0
Ireland	62,2	79,1	88,8	58,4	76,7	86,8
Korea	67,8	72,8	79,1	65,9	70,1	76,8
Mexico	65,1	67,5	85,1	63,5	65,3	82,0
Poland	51,7	74,0	88,1	37,7	61,7	82,7
Portugal	77,8	85,0	92,3	71,5	79,3	87,3
Slovak Rep.	42,6	81,1	87,9	21,7	70,8	84,0
Spain	64,6	60,6	87,7	58,6	74,7	87,7
Turkey	53,8	69,8	81,8	49,1	63,2	76,1
EU-15	63,8	80,2	88,3	57,8	75,5	84,5
EU-19	60,3	79,7	88,1	52,9	74,3	84,4
OECD-Europe	61,8	80,0	88,3	55,0	75,0	84,8
Total OECD	62,7	79,4	87,4	56,5	74,8	84,1

Source: OECD, 2007c.

It is also relevant to emhasize that education plays a crucial role in encouraging labor force participation. As of 2007, 46.4% of the educated below highschool level is in the labor force, and this figure jumps to 78.6% for the ones with higher education. LFPR for men educated below highschool level was 70.7%, and the rate for women was 21.3% in 2007. Regarding those at highschool level, male LFPR was 73.3%, whereas female LFPR was 31.7% for the same year. Women with university

education have participation rates which are close to those of men. LFPR of the women with university education was 70.4% in 2007 which was only 13.5 percentage points lower than LFPR for males (Table 1). This confirms that the higher educational level leads to higher participation rate and narrows the gender gap in this respect. This result holds for other OECD countries as well; the highest laborforce participation is observed among the ones with the highest education level (Table 2).

2.4. Employment

Employed population refers to individuals in the working age group (15-64 years) taking place in any economic activity as a wage-salary earner, self-employed, employer or unpaid family worker, including part-time workers. Based on the findings of TEI (2005), the growth rate of employment, defined as the ratio of the number of employed people to the working age population, has been all negative since 2001-crisis, with 2004 during which employment rate rose by 2.03 percentage points, being the only exception. Extending the sample period back to 1988, employment rate was 52.6% in 1988. The rate dropped to 47.5% in 1993 the year just before the 1994 crisis; with a slight increase it reached 50% in 1994 and remained there for two years. Since then, the downward trend of employment rate has not been reversed, except in 2004 with a 0.5-points increase. By 2007, working age population was 49.2 million; 21.2 million of which were employed. This accounts for 43.1% of working age population (Figure 1).

Population growth has outstripped employment growth for many years; the working age population grew by 23 million between 1980-2004 but only 6 million net jobs were created. The figure clearly attests a low performance of economy in job creation (World Bank, 2006). The situation is not different according to TURKSTAT data based on the 1988-2007 period, the data indicates that the working age population grew by about 16 million; however, only 4 million employment was created.

Table 3. Trends in Working Age Population and Employment

	TOTAL		MALE		FEMALE	
	1988	2007	1988	2007	1988	2007
15+ (000)	33.746	49.215	16.661	24.354	17.085	24.861
15+ (%)	63,3	71,4	62,5	70,9	64,1	71,9
Employment (000)	17.755	21.189	12.520	15.661	5.235	5.528
Employment Rate (%)	52,6	43,1	75,1	64,3	30,6	22,2

Source: TURKSTAT, 2008.

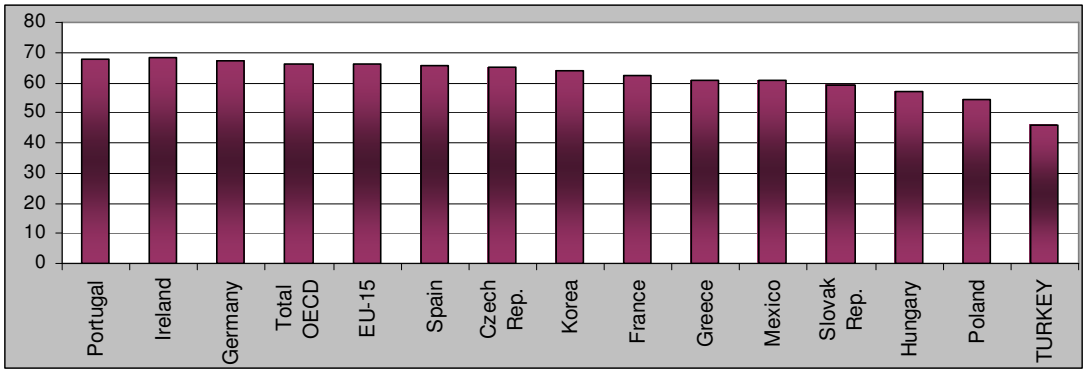
To understand relatively low employment performance of Turkey, World Bank (2006) compares Turkey with nine countries in terms of employment rate[4]. Six of the nine countries had faster employment growth than Turkey between 1981 and 2003. Brazil, Mexico, Argentina and Spain showed better employment creation performance although their output growth was slower. In Korea and Ireland, both employment generation and output growth were strong.

A similar comparison with 12 individual countries[5] (6 of 13 countries, including Turkey, are also investigated in the World Bank report in 2006), OECD average and the EU-average still shows Turkey at the bottom. Even Slovak Republic and Poland outstrips Turkey, although unemployment rates in those countries are much higher. Average employment rates in the OECD and EU-15 exceed that of Turkey by twenty percentage points (Figure 3). In other words, the capacity of the Turkish economy to create employment is quite limited relative to the developed as well as a selected list of developing countries.

[4] The nine comparator countries are Argentina, Brazil, Mexico, Spain, Ireland, Korea, France, Greece and Portugal.

[5] Czech Republic, France, Germany, Greece, Hungary, Ireland, Korea, Mexico, Poland, Portugal, Slovak Republic, Spain and Turkey.

Figure 3. Employment Rate by the Selected OECD Countries, 2006



Source: OECD, 2007c.

One of the main problems of the Turkish labor market is the existence of a high share of relatively low educated, low skilled labor with low productivity. Although there has been a considerable progress during the last decade, as of 2003, still 74% of the adult population aged between 25-64 years had below upper secondary level of education attainment, 17% was educated at upper secondary and 9% was composed of university graduates. Moreover, approximately one out of ten people was illiterate as of 2003 (OECD, 2004). Looking at the distribution of employment by education levels, it is clearly observed that the rise in educational attainment has positive repurcussions on employment rate. While the share of illiterate workers was 17.6% in total employment, it decreased to 4.9% in 2007. Over the years, university graduates have taken a larger share in employment; such that, the proportion of higher educated (including university graduates and those with higher degree) in total employment increased from 4.9% to 13.1% between 1988-2007. The observation is valid for both sexes: the share of low educated exhibited a down-ward trend during the period. However, in contrast to this general trend, the share of female employment below upper secondary education increased as well. Although there is a significant increase in the educational profile of employment, still the largest proportion of employment is held by workers below highschool education (Table 4).

Table 4. Employment Rate by Educational Levels: 1988-2007

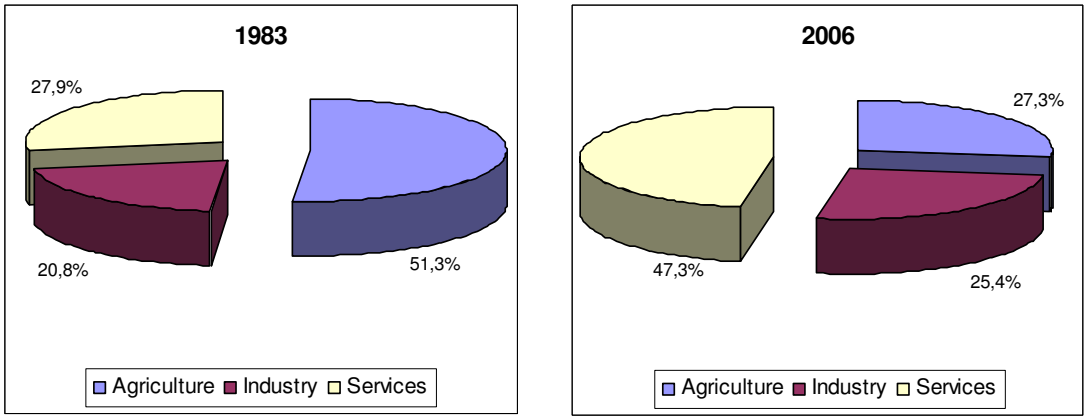
	Total		Male		Female	
	1988	2007	1988	2007	1988	2007
Illiterate	17,6	4,9	10,4	2,0	34,5	13,0
Less than Highschool	68,6	60,8	74,5	63,3	54,2	53,8
High and Vocational Highschool	9,0	21,2	9,8	22,9	7,1	16,4
Higher Education	4,9	13,1	5,2	11,9	4,0	16,7

Source: TURKSTAT, 2008.

2.4.1. Structural Change Process

Low employment performance of Turkey should partly be accounted for the demographic transition and urbanization tendency, associated with movements out of agriculture since the early 1980s. While agriculture was the largest employer sector in 1983, accounting for 8.3 million jobs or 51.3% of the total, agricultural employment decreased to 27.3% in 2006 via loss of 7.5 million jobs that was replaced by manufacturing and services. That is to say, industry added 1.5 million new jobs and its share of industrial employment increased from 20.8% in 1983 to 25.4% in 2006. Services exhibited more respectable growth over the period, accounting for 4.5 million jobs in 1983 and 10.6 million jobs in 2006, so it became the largest employer in the economy. Even though employment in the services sector constitutes the highest share with 47.3% in 2006, this rate is still below the averages of the OECD and EU-15 (69.7% and 70.1%, respectively) (OECD, 2008) (Figure 4).

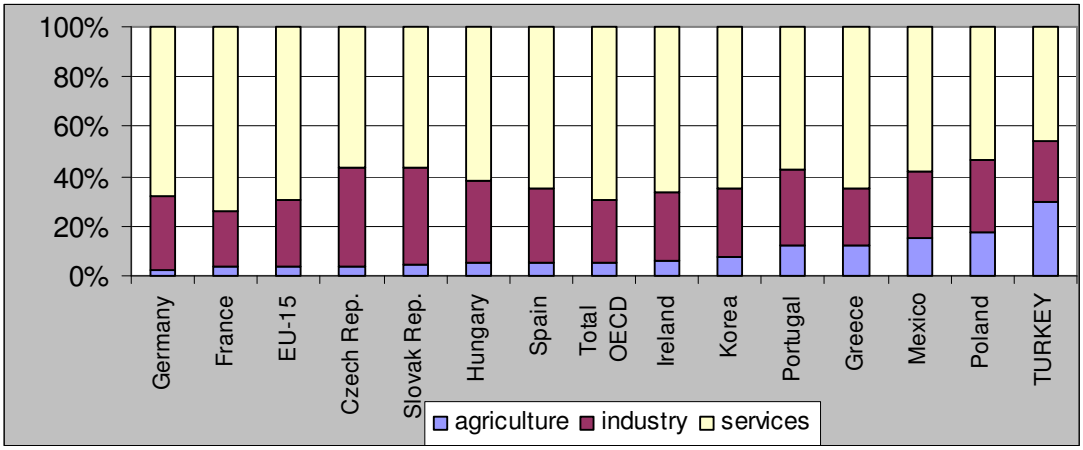
Figure 4. Employment Rate by Sectors: 1983 and 2006 (as a Percentage of Civilian Population)



Source: OECD, 2008.

Comparing sectoral distribution of employment in Turkey with OECD countries, agricultural employment was 3.6% in EU-15, 5.5% in the OECD, whereas it was 27.3% in Turkey in 2006. Poland, following Turkey, had the largest agricultural employment share with 15.8% in 2006. The share of industrial employment in the EU-15, OECD and Turkey showed a close trend with each other with 26.3%, 24.9% and 25.4% respectively. As to services sector, Turkey has the lowest share among the OECD, followed by Poland with a share of 54.2% (OECD, 2008; Turkish Industrialists' and Businessmens's Association (TIBA), 2004) (Figure 5).

Figure 5. Sectoral Distribuiton of Employment in the Selected OECD Countries, 2006



Source: OECD, 2007c.

Although, compared with other middle-income countries, Turkey has experienced relatively slower employment growth in services sector, services will probably play a more important role to absorb surplus labor coming from agriculture. Bulutay (1995) also draws attention to this structural change process via movement of people from rural areas to cities; from agriculture to industry or services. He argues that service sector has become the leading sector in this process because the development process of Turkey is not based on industrialization.

As mentioned before, there has been a marked decline in agricultural employment especially for the last two decades due to mechanization, removal of agricultural subsidies especially after 2000, and accordingly migration towards cities. World Bank (2006) reports that there was net loss of 850.000 jobs in agriculture since 1989. To illustrate, 8.9 million workers were employed in agriculture in 1999, whereas agricultural employment decreased to around 6.1 million in 2006. This dramatic drop over the period has brought migration from rural into urban areas. Such a movement can also be observed from the ratio of urban to rural population (under a negligible rate of population growth of 1.24 % in 2006). While urban population constituted 57.3 % of total population in 2000, it increased to 62.7 % in 2006; accordingly rural population decreased to 37.3% from 42.7% (SPO, 2007). Yet agricultural sector still

takes a significant share of employment (accounting for 27.3% of total employment) relative to other countries (Figure 5).

To understand the profile of agricultural employment, it is important to investigate employment by status, particularly in agriculture. The labor force as well as the employed in agriculture mostly compose of low-educated/unskilled unpaid family workers, majority of which are female. The dominant employment status is unpaid family workers and the self-employed. While women constitute the great majority of unpaid family workers, men account for most of the self employed. According to TURKSTAT statistics of 2007, 51% of the 5.6 million individuals employed in agriculture consisted of unpaid family workers and 76.9% of unpaid family workers accounting for 80% of total female employment were women. The share of regular and casual employees including wage and salary workers (5% in 2007) in agriculture was small relative to the other status. Self employed and employers account for the second largest share (44% in 2007) in total agricultural employment. Men dominate in this type of employment status; 80.8% of 2.6 million self employed accounting for 69% of total male employment was composed of men (Table 5).

Table 5. Agricultural Employment by Status, 2007

	TOTAL		MALE		FEMALE	
	(thousand)	(percentage)	(thousand)	(percentage)	(thousand)	(percentage)
	5.601	100	2.986	100	2.615	100
Regular and Casual Employee	458	5	298	7	160	3
Self employed and employer	2.600	44	2.101	69	499	17
Unpaid family worker	2.543	51	587	24	1.956	80

Source: TURKSTAT, 2008.

Given the projection of annual average growth rate of labor supply of around 3% between 2000 and 2010, around 500-550 thousand new jobs should be created in a year to avoid an increase in unemployment (TIBA, 2004; Gürsel, 2005). As employment opportunities have been phasing out in agriculture, it means non-agricultural jobs should be created in urban areas to absorb the excess supply of labor dropping out of agriculture. Here the most significant role is to be undertaken by

services sector. Since low productive labor is the main characteristic of agricultural employment, high demand for low skilled jobs in urban areas will result in serious unemployment problem given the low employment creation capacity of the cities especially in the field of low skilled jobs[6]. The alternative to being unemployed for the low skilled surplus labor is looking for work in the informal sector. In brief, the destructive effect of the structural change process does not seem to be only limited to creating unemployment problem in urban areas, rather it brings about as much serious challenges like informalization.

2.5. Unemployment

According to the definition of ILO, "open unemployment[7]" is the difference between the labor force and the employed which refers to the working age population ready to work and seeking job actively. TEI (2005) adopts this definition, and describes unemployment as being in a position not to be able to get a job at the current wage level despite being capable, willing and ready to work. That is to say, willingness and effort to get a job are main determinants to be regarded as being unemployed. Unemployment may be caused by aggregate demand inadequacy, cyclical fluctuations, structural problems, technological developments, seasonal changes, frictional (contingent) or natural reasons and socio-economic structures as well (TEI, 2005). TIBA (2004) regards the unemployment problem in developed countries as a structural issue based on institutional factors of labor market, accordingly low unemployment levels in the United Kingdom (UK) (of 5.4% in 2006) and the United States (US) (of 4.7% in 2006) are considered to be an outcome of more flexible labor markets relative to other west-European countries (unemployment rates were 10.4%

[6] Job creation is particularly low in low-skilled jobs, this is because of the tendency towards medium to high-tech production. The transformation in the charecteristics of production function of course affects the profile of labor demand. That is why low skilled labor force coming from agriculture should have more difficulties finding jobs in urban areas.

[7] Official statistics count only those who have no work but are actively looking for work as unemployed, called "open unemployment". Those who have given up searching for jobs are not officially counted among the unemployed, even though they are not employed. The same applies to those who have taken early retirement to avoid being laid off, but would prefer to be working, or those with high skill levels in low-paid jobs that do not require such abilities otherwise not to be remain unpaid. This type of unemployment is called "hidden unemployment" or "underemployment". Henceforth, unemployment refers to open unemployment in this study.

in Germany, 9.8% in France, 8.6% in Spain as of 2006). Unemployment in developing countries is, however, regarded as a result of structural change, that is, the transition from agriculture-dominated economy to industry- and services-dominated economy (Bulutay, 1995). In addition to the effects of structural transition, the mainstream view considers the main cause of unemployment problem in Turkey to be labor market rigidities. This is also the case in other developing and even developed countries (See OECD, 1994; TIBA, 2004; World Bank, 2006, and so forth).

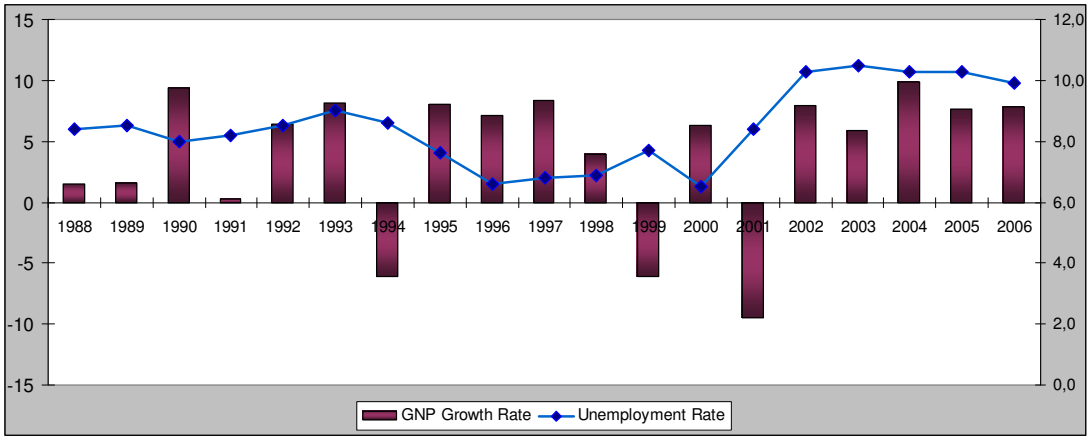
2.5.1. Jobless Growth

Although it is not a new phenomenon for Turkey, unemployment has taken place at the top of agenda as one of the most challenging issues since the crisis in 2001. Unemployment has followed almost a constant upward trend since early 1980s. With the beginning of structural adjustment programs in 1980 accompanied by a structural transition in economic policy arena (a shift from import substitution to export orientation), unemployment has followed almost a constant trend. With the transition to export-led growth, output growth exhibited a remarkable increase; however, (un)employment moved irrespective of economic growth throughout the period. Recalling long-run trends in employment rate from Figure 1 and those in GNP growth from Figure 6, it is clearly observed that employment rate does not show a strong cyclical relationship with output growth either. The un-responsiveness of employment to output growth may also be illustrated via the correlation coefficients: The coefficient between unemployment rate and Gross National Product (GNP) growth for the period of 1988-2006 is 0.15, whereas it stands at a level of -0.21 between employment rate and GNP growth.

Illustrating one particular episode of “jobless growth”, Turkish unemployment rate has been increasing with increase in output since 2001 crisis. Although there were previously any other periods where (un)employment was not elastic to output growth, this phenomenon has lately been much pronounced for Turkey. This is basically because of the substantial performance in economic growth without any repercussion on labor market. The correlation coefficient between un/employment

rate and GNP growth is quite small for the period 2002-2006 although it is negative for unemployment (-0,25) and positive for employment rate (0,38)[8]. This finding reveals that unemployment could not be reduced below 10% level despite a cumulative output growth of 25% after the crisis. Similarly, employment did hardly respond to economic growth; employment rate shrank by 3.7% between 2001-2003, and has continued to fall thereafter (Figures 1 and 6).

Figure 6. The Correlation between Unemployment and GNP Growth



Source: TURKSTAT, 2008.

Table 6 also portrays the validity of jobless growth in Turkey in recent years. Turkey has experienced a rapid recovery in output growth since the 2001 crisis; however, employment remained so moderate compared to output growth and as a result, unemployment has remained high[9]. Average growth rate of the Gross Domestic Product (GDP) during 2002-2007 is 6.8%; we observe a steep increase following the crisis in 2001 up to until 2005. For the last two years, GDP growth exhibited a declining trend; however, over the next two years it is expected to re-increase to

[8] Including the crisis year, 2001, into the calculation, the coefficient becomes fairly high and negative for employment (-0.8), and positive for unemployment (0.9). It means that the crisis had a considerable adverse effect on labor market indicators. (The fact is also observed from Figures 1 and 6). However, the crisis year is excluded from the calculation since the main concern is to see how labor market has reacted to economic growth.

[9]One of the main reasons why output growth does not result in employment growth is observed to be high rates of growth in labor productivity. Focusing on the period after the crisis, average yearly increase in productivity between 2002-2005 was 8.6% per worker in manufacturing; however, this productivity increase was mainly based on longer working hours rather than new investments or new technological developments leading to new employment (TEI, 2005; Voyvoda, 2005).

5.8% in 2008 and 6.5% in 2009 (European Union Statistical Institution (EUROSTAT), 2007). Unemployment rate in Turkey was 6.5% in 2000, 8.4% in 2001, 10.3% in 2002, and 10.5% in 2003. The unemployment rate was constant at 10.3% in 2004 and 2005, and it has remained at around 10% since then.

Table 6. Rates of Unemployment and Real GDP Growth since 2000 (Percentage Change from Previous Year, at 1987 Prices)

	2000	2001	2002	2003	2004	2005	2006	2007
Unemployment Rate	6,5	8,4	10,3	10,5	10,3	10,3	9,9	9,9
GDP Growth Rate	6,8	-5,7	6,2	5,3	9,4	8,4	6,9	4,5

Source: TURKSTAT, 2008; Undersecreteriat of Treasury, 2008.

The "jobless growth" concept is not specific to Turkey[10]. At this point, it becomes worthwhile to investigate the issue in a number of comparator economies. Unemployment is a common problem in developing countries; most of the developed countries are not exceptions. It is rather a severe problem in the new member states of EU, with Poland and Republic of Slovakia having the highest rates of unemployment with 14% and 13.3% in 2006 of all the OECD countries (Table 7). Based on 2006 OECD statistics, the middle-income countries can be classified as countries with high rates of unemployment (above 7%) such as the Czech Republic, Greece, Hungary, Poland, Portugal and Republic of Slovakia; and those with low unemployment rates (around 4%) such as Ireland, Korea and Mexico. Unemployment rates in many developed countries are as high as those in developing countries. Except for Denmark, Iceland, Japan, Luxemburg, New Zealand, Norway, Switzerland, UK and US where unemployment rates were about 5%, unemployment rates in developed countries fluctuated around 8%-10%. The average unemployment rate was 6.3% in OECD and 8% in EU-15. Furthermore unemployment rates in Germany, Poland, Portugal and Slovak Republic have exhibited an uptrend for the last decade as in the case of Turkey (OECD, 2007c).

[10] Sengenberger (2006) reports that employment in Central and Eastern European countries (i.e. Bulgaria, Lithuania, Poland and Romania) has been little responsive to economic growth. The Asian-Pacific region has also experienced very slow employment growth despite a considerable rate of GNP growth, indicating the emergence of the phenomenon of jobless growth (Schlein, 2006).

Table 7. Trends in Unemployment Rate in the Selected Developed and Developing Countries: 1985-2006

	1985	1990	1995	2000	2006
Developed Countries					
Canada	10,6	8,1	9,5	6,8	6,3
France	10,5	9,4	11,6	10,3	9,8
Germany	7,3	4,9	8,2	7,8	10,4
Japan	2,6	2,1	3,2	4,7	4,3
Korea	4,0	2,5	2,1	4,3	3,6
Spain	21,6	16,1	23,0	13,9	8,6
UK	11,3	6,9	8,6	5,5	5,4
US	7,2	5,6	5,6	4,0	4,7
Developing Countries					
Czech Rep.	..	0,8	4,1	8,8	7,2
Denmark	7,3	8,4	7,1	4,6	4,0
Greece	7,8	7,2	10,0	11,3	8,9
Hungary	..	10,0	10,4	6,4	7,5
Ireland	16,7	13,3	12,2	4,4	4,4
Mexico	2,7	3,1	5,8	2,2	3,3
Netherlands	11,1	7,6	7,1	2,9	4,4
Poland	..	3,7	13,3	16,4	14,0
Portugal	8,7	4,9	7,2	4,2	8,1
Slovak Rep.	..	..	13,1	18,8	13,3
Turkey	7,1	8,2	7,6	6,7	10,1
EU-15	10,5	8,2	10,8	8,2	8,0
EU-19		9,0	11,2	9,1	8,5
Euro Area	10,7	8,8	11,4	8,9	8,5
Total OECD	..	6,4	7,4	6,1	6,3

Source: OECD, 2007c.

To understand the main characteristics of unemployment in Turkey, it is relevant to investigate unemployment rates by selected age groups and the level of educational attainment. Table 8 reveals that the unemployment rate for both sexes is the highest for the age group 20-24 (19% for men and 21.2% for women). This means that there is a high probability to become unemployed just after graduation from university, though this age group does not only consist of the higher educated people. In this context, it is necessary to glance over the educational profile of the unemployed by age groups. Unemployment problem is prevalent especially among educated young people. Of all the age groups, unemployment rate for university graduates of 38.5% was the highest in the age group 20-24 years. High unemployment rates for the

educated may indicate the inability of the economy to generate jobs that can absorb them or the mismatching problem between skills required by labor market and the education provided by the universities (World Bank, 2006). Pursuant to the age group 20-24 years, the second highest unemployment rate (16.9% for men and 17.1% for women) belongs to the youngest age group of 15-19 years referring in part to years at tertiary education. Above 25 years-old, unemployment rate decreases relatively.

Table 8. Unemployment Rate by Age Groups (%), 2006

	15-64	15-24		25-54			55-64	65+
TOTAL	10,1	18,7		8,4			3,8	0,5
Men	9,9	18,2		8,8			4,9	0,7
Women	10,6	19,8		8,2			0,8	0,0
		15-19	20-24	25-34	35-44	45-54		
Men		16,9	19,0	10,1	7,0	7,4		
Women		17,1	21,2	12,2	6,2	2,8		

Source: OECD, 2008: 335.

Table 9. Unemployment Rate by Age Groups in terms of Educational Attainment (%), 2003

	Illiterate	No Diploma	Primary	Secondary	Tertiary
15-19	18,0	27,7	13,7	29,5	0,0
20-24	17,0	37,5	16,1	23,4	38,5
25-29	16,3	14,8	12,2	12,2	14,8
30-39	24,7	33,4	18,4	12,5	9,4
40-49	7,5	9,5	7,8	4,6	2,5
50+	6,6	6,4	7,3	9,7	2,2

Source: World Bank, 2006: 11.

Unemployment seems to be rather a problem in urban areas especially for women. As of 2005, unemployment rate for women was 12.7 % in urban and 6.8 % in rural. While unemployment rate for urban males fluctuated around 11% between 1988 and 2005, the rate for urban females fell from 28 % to 18 % (SPO, 2007). The reason for why female unemployment rate was higher than male in urban areas is mainly explained by inability of to get skill-required jobs given their responsibilities for

house work and child care. In addition, women with lower levels of education are discouraged by high unemployment rates and quit job searching, whereas younger and better-educated women increasingly attach to the labor force. This situation is explained by the term “discouraged worker effect” (World Bank, 2006).

In the light of these explanations, the discussions in this chapter have taken root from the question; why economic growth in Turkey can not create employment or solve the unemployment problem. The question is tried to be answered by another question such that whether labor market rigities in Turkey are mainle responsible for unemployment/low employment performance, as the main stream view claims. Note that the question what other factors can be responsible for low employment performance despite relatively high economic growth is not the concern of this thesis. To understand whether or not Turkish labor market is inflexible, the next two chapters examine a selected set of labor market flexibility indicators. It is not expected to reach an overall assesment such that Turkish labor market is totally flexible or inflexible because flexibility is investigated via seperate indicators, but not through an aggregate index. Therefore, some of the labor market indicators will probably be found to be flexible, while others are inflexible.

CHAPTER 3

LABOR COST FLEXIBILITY

3.1. Introduction

This thesis follows the categorization in Monastiriotis (2003) in the multi-pronged analysis of the labor market flexibility. This chapter analyzes the first component of labor market flexibility, "labor cost flexibility" included in this thesis. The second component, "production function flexibility" is discussed in the next chapter[11].

In this chapter, "labor cost flexibility" is explored through four sub-indicators; wage flexibility, non-wage cost flexibility, unemployment flexibility and union flexibility. The research on wage flexibility is mainly based on observation of wage cycles by using long-term time series data. The analysis also sheds light on the significance of power relations in determining the relationship between wages and unemployment on a Marxian conception of the labor market and the reserve army hypothesis (Onaran, 2002). The second element to be examined under the title of labor cost flexibility is related to non-wage component of the labor cost. High tax wedge defined as the ratio of income tax plus employers' and employees' social security contributions in total labor cost has recently received considerable attention in

[11] Being aware of the fact that data limitation is likely to restrict the scope of the research, some sub-indicators covered by Monastiriotis (2003) are excluded from the thesis, and the rest is examined with a warning to be cautious in interpreting the results. In this regard, the third component of labor market flexibility named "supply side flexibility" is not included in the thesis. Monastiriotis (2003) examines supply-side flexibility through flexibility in labor mobility and flexibility in skills acquistion. The first component refers to the prospensity of workers to move across occupations, sectors, regions or jobs (including the average length of job tenure) and the second one includes active labor market policies and arrangements about formal education and job-related training. Neither of these sub-indicators is possible to quantify. The second reason for why supply side flexibility is not included in this thesis is that supply side flexibility mainly stems from the view to reduce production cost through productivity increases and higher responsiveness to demand changes, without any loss in the labor's share. On the contrary, the two flexibility types analyzed in this thesis mainly come from the employers' side with a single focus on cost-minimization. The distinctive characteristic of supply side flexibility makes it necessary to have a seperate analysis.

Turkey as one of the main factors behind poor employment performance[12]. The third indicator of labor cost flexibility is unemployment flexibility. It includes minimum wages and unemployment insurance benefits which are discussed on the basis of related legislation. Since unemployment insurance sheme was introduced to Turkey in 1999, and the first payments were made in 2002, the research period is confined to a few years. On the other hand, minimum wage cycles are examined through long-term time series as in the case of wage flexibility. Lastly, union flexibility is analyzed as a component of labor cost flexibility. First, the transformation in the trade union movement after 1980 is investigated within the framework of the related legislation. Then the trends in union coverage and union density are observed for the same time period. Final component discussed under this type of flexibility is wage bargaining structure.

Before analyzing each indicator individually, this chapter takes a brief look at the flexibility definitions in literature and what we understand from labor market flexibility.

3.2. Conception of Labor Market Flexibility in the Literature

We have been observing that higher and higher importance being attached to "flexibility" by employers, by governments and by major international organizations such as EU, OECD and World Bank in order to reach a well performing labor market (OECD, 1994; OECD, 1998; European Community (EC), 2006; World Bank, 2006). Flexibility arguments have taken place at the top of the agenda of the mainstream view as a solution to the bottlenecks in the labor market. Indeed, those arguments have emerged in parallel with resurgence of neo-classical theory, rooted in marginalist principles. According to this theory and its variants, the permanent charecteristic of unemployment stems from the rigidities in the labor market[13].

[12] The other charge on employers taking as much stress due to its adverse effects on employment creation is severance pay, which is not covered by labor taxes. Severance pay is discussed as a component of production function flexibility.

[13] Variants of this theory (e.g. the theory of natural rate of unemployment and efficiency wage theory) consider wages above the market-clearing level as the main factor responsible for persistent

That flexibility-oriented approach perceives labor market as any other good market in which fully competitive market determines prices (market-clearing wages) via an equilibrium between supply and demand functions (of labor). The equilibrium is achieved by an automatic mechanism as is the case of invisible hand. In the event of a deviation from the equilibrium, the mechanism spontaneously returns the market to equilibrium by adjusting wages, unless there are any distortions. Government interventions, specifically labor market regulations define distortions (Bulutay, 1995; Onaran, 2002). Those regulations are regarded as making employers hesitant in hiring new employees and lead poor employment creation performance. Therefore, the solution suggested to sustain labor market equilibrium is labor market flexibility.

Turkey has recognized flexibility arguments with the introduction of Structural Adjustment Programmes (SAPs) since the early 1980s, which refers to a transitional period from import substitution to export-led policies. SAPs have attached such a crucial role to the labor market that success in macro economy (i.e. foreign exchange and export policy, or economic growth) would depend on the adaptability of the labor market (Onaran, 2004; Şenses, 1994). The solution to the (un)employment problem has been sought in labor market flexibility. In this respect, it becomes important to answer whether labor market rigidities constitute hindrance to employment creation, and accordingly to reductions in unemployment.

Turkey is not the only country where flexibility arguments have recently gained strength. Flexibility is presented throughout the world as a remedy to overcome the bottlenecks in the labor markets. International institutions such as the IMF, OECD and the World Bank[14], have submitted a standard recipe to the economies, which suggest easing labor market regulations to increase employment creation capacity. These institutions relate the success of the UK and US labor markets to their flexibilities, and high unemployment rates of the European countries to their

unemployment. Likewise, job search theory argues that the social wage which includes unemployment insurance benefits is the relevant determinant of unemployment (Kucera, 1998).

[14] See IMF (1999), OECD (1994), World Bank (1995).

inflexibilities[15] (Brodsky, 1994). On the other hand there are strong opposite approaches to this view, one of which, on the basis of emprical evidence, argues:

> "what distinguishes Germany and France from Japan and the US is not a shortage of labor market flexibility but rather a shortage of jobs. It may be simplistic to argue that high European unemplomet can be overcome with a return to the old macroeconomic policies of the Keynesian concensus. The world is probably too changed since then. Yet there is no strong empirical support for the prevailing view that high unemployment results from labor market rigidities. The main causes of high unemployment appear to lie elsewhere" (Kucera, 1998:24). [16]

First of all, it is important to define labor market flexibility which has been pronounced in such a frequency. For some, it refers to the degree and speed of adjustment of labor markets to changes in economic conditions, including the strategies of employers or governments within the aim of cost reduction or productivity increase (Brodsky, 1994; Monastiriotis, 2003; Ozaki, 1999). Studies generally examine labor market flexibility by focusing on the arrangements firms use to adjust to demand changes; i.e. deregulation of employment protection, use of atypical employment contracts, relaxation of working hours and minimization of labor cost[17].

From another perspective, labor market flexibility is considered as a method enabling workers to "adjust working life and working hours to their own preferences and to their activities, especially through the use of working time flexibility" (Jepsen and Klammer, 2004:157). Chung (2006) opposes the "traditional definition" of flexibility which only focuses on reducing labor cost mainly and comes from the side of employers and the government. He believes that there is a need for a change in this definition of flexibility, and gives information on the use of various flexibility

[15] As illustrated in Table 7, unemployment rates in the UK and US were 5.4% and 4.7%, repectively, whereas unemployment rates are 10.4% in Germany, 9.8% in France and 8.6% in Spain as of 2006.

[16] Related to this point, a second question comes in mind: what may be the cause(s) of high unemployment other than rigidities? Although this question is not main concern of this thesis, the findings may provide some hints to an answer.

[17] These discussions are based on a generally accepted assumption that there is a dichotomy between flexibility and job security. Flexibility is considered for the needs of employers while security is for the workers. From the perspective of firms which perform with the aim of profit maximization/cost minimization, flexibility is an indispensable way to get competitive advantage through relatively lower costs to other firms, so as to maintain its dominant share in the market. From the opposite perspective, flexibility is thought to bring insecurity to workers while it is the security what workers need (Chung, 2006; Kucera, 1998).

measures to be considered for the needs of both firms and employees. He states that "flexibility can be helpful in accomodating workers' need to combine work with care, education, leisure and other individual preferences in life styles"(Chung, 2006:2). According to this view, labor market flexibility should ever be perceived as further than applying atypical employment arrangements or easing protectionist regulations; it is rather relying on working-time options that workers can choose according to their needs throughout the life course[18].

Similarly, Wallace (2003:781) describes new ways to look at flexibility. He considers flexibility to mean "the way in which people will vary their place or time of work. So in this way, we can measure flexibility as something related to typical rather than atypical employment. In other words, we can measure the degree of flexibility within regular, full-time jobs or part-time jobs". This broader context of flexibility enables empoyees to control their working hours according to their needs. With reference to a project entitled 'Households, Work and Flexibility', Wallace (2003) examines flexibility in eight European countries in terms of time (working hours), place (place of work) and conditions (contractual arrangements). By doing this, he avoids the traditional one-sided aspect of flexibility definition.

This thesis adopts the "traditional" definition of labor market flexibility which mainly focuses on cost-reducing and/or productivity-increasing aspect of flexibility as opposed to the "new generation" definitions.

[18] In this context, it is relevant to adress a new concept called "flexicurity" combining flexibility with security in labor market. Flexibility and security can live together by accomodating both the needs of employers and employees (Chung, 2006). By this view, the dichotomy between flexibility and job security which is assumed by traditional flexibility definition is refuted. See Wilthagen (1998); Wilthagen and Tros (2004) for detailed information about the phrase flexicurity. See Ercan and Tansel (2006) and Taymaz and Özler (2004) for the recent debates about flexicurity in Turkey.

3.3. The Indicators of Labor Cost Flexibility

3.3.1. Wage Cost Flexibility

Wage cost flexibility refers to the adjustment of wages to economic fundamentals; downward wage movements during recession periods and upward trend during expansion periods. In reverse, wage rigidity means irresponsiveness of wages to negative demand shocks. According to neoclassical theory, labor market regulations such as severance payments, minimum wage legislation, trade unions and collective bargaining agreements are regarded as the main causes creating wage rigidity. Wages deviate from market-clearing level[19] due to those interventions outside the market, and excessive wages eventuate in surplus labor supply and hence unemployment. Neoclassical theory supports its arguments suggesting a positive correlation between wage rigidity and unemployment by two main approaches: The first one regarding "wages as a cost item" is based on the assumption of full elasticity of substitution that capital (labor) can be substituted for labor (capital), when the wage-rental ratio decreases (increases). To this view, high levels of unemployment indicate lack of flexibility in wages and the only way to increase employment is to reduce wages (Bulutay, 1999; Onaran, 2002). The second approach of neoclassical theory considers "work as a personal choice". According to this view, a person decides to work through a choice between wage (marginal productivity of labor) and marginal utility of leisure (Bulutay, 1999: 19).

In explaining the relationship between wages and unemployment, alternative to neoclassical arguments come from the so-called "Marxian Reserve Army of Labor Hypothesis". Marxian approach does not percieve a positive relationship between wage rigidity and unemployment, but tries to understand cyclical behaviour of wages by giving priority to class struggle in the wage setting mechanism (Onaran, 2004). Reserve army of labor means excess supply of labor, which is regarded as the permanent feature of a capitalist economy:

> "…the reserve army of labor is a result of an indefinitely elastic supply of labor from non-capitalist sectors of the economy, such as household production, or supply of labor from other countries or paid the continual recreation of a group

[19] The level at which demand and supply of labor is at equilibrium.

> of unemployed through economic crises or rapid structural and technical change" (Onaran, 2004: 10).

The analysis draws attention to the significant role of power relations between the employers (the capitalist) and the emplyees (the working class) in determining the relationship between wages and unemployment. The existence of reserve army of labor reduces the bargaining power of the workers, leads wages to decline, and hereby increases wage flexibility. Workers are obligated to admit wage contractions in order to protect their jobs (Onaran, 2002). "The reserve army serves the function of a disciplining device on the labor force, which forces them to work harder and for less." (İlkkaracan and Selim, 2004:3). The suplus labor supply is regarded as an inevitable part of a market economy, rather than a market imperfection. For this reason, full employment can not be sustained in a capitalist economy given the permanent feature of involuntary unemployment (İlkkaracan and Selim, 2004; Onaran, 2004).

- **Real Wage Cycles since 1974**

To analyze wage cost flexibility and the validity of such arguments, trends in real wages and unemployment rates should be examined (within the context of balance of power relations) by taking into account their cyclical pattern. An observation of wage trends for a long-time period with respect to changes in unemployment rate will also help to assess the validity of neoclassical arguments which require downward wage adjustment to reduce unemployment. Such an observation lays the groundwork for answering whether the neoclassical argument holds in Turkey, and whether wage rigidities exist to account for the responsibility of high unemployment in Turkey.

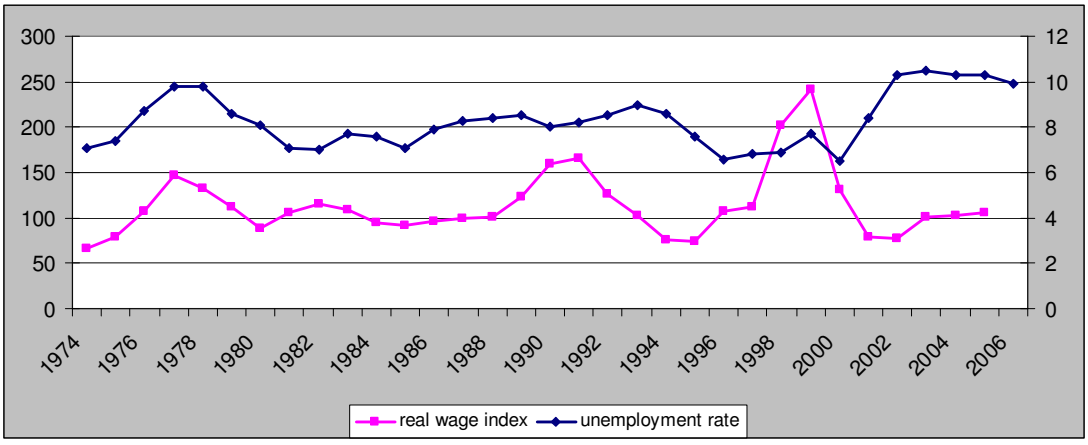
Onaran (2002; 2004) analyzes the relationship between real labor cost and unemployment rate for the period 1974-1993 in terms of three subperiods; the 1974-1979 period refers to the import substitution industrialization period and the sub-periods 1980-1988 and 1989-1993 refer to export-led growth periods[20]. She defines

[20] In her analysis, Onaran uses data from TURKSTAT on private manufacturing firms employing 10 or more workers. The public sector is excluded from the analysis to leave out the impact of political

the change in real unit labor cost as a function of the change in the rate of unemployment and finds that the correlation between these two indicators depends on the balance of power relations.

Similarly, the current study examines the long-run relationship between real wages and unemployment based on its own calculation of real wage index in private sector for the period 1974-2006. Instead of classifying the period under subgroups, the breaking points are focused on. Consistent with Onaran's findings, wage movements exhibit overall cyclical trend with respect to unemployment for three decades, but do not indicate a stable counter- or pro-cyclical trend.

Figure 7. Trends in Real Wage Index for Private Sector and Unemployment Rate (1987=100)



* Unemployment rates before 1988 are compiled by Bulutay (1995).

Source: SPO, 2007[21]; TURKSTAT, 2007.

Figure 7 depicts that real wages follow a strong pro-cyclical movement between 1974-1979, and a counter-cyclical movement during the 1980-1988 period with respect to unemployment rate. The pro-cyclical relationship between unemployment,

conditions on wage bargains. The other restriction to the coverage of the analysis is related to the firm-size. The survey exclude small-scale firms (employing less than 10 workers), which are more likely to be informal.

[21] Real wage index is based on own calculations calculated using data from SPO for nominal wages and whole price indices.

output and real wages in the pre-1980 period can be explained by the powerful position of trade unions which managed to keep wages high in spite of rising unemployment rates. This points out the importance of balance of power relations in the wage bargaining process (Onaran, 2004).

After 1980 unemployment trends generally moved irrespective of real wages. The deterioration of real wages (except for 1989-1992) did not bring about reductions in the unemployment rate. In the first phase of export-led growth period (1980-88), there was a counter cyclical trend in wages despite a decline in unemployment. Such an observation resulted from the change in the balance of power relations against labor under the military regime, which was accompanied with changes in the Labor Law, was on the rule[22].

In 1989, the year of spring demonstrations, real wages showed a substantial recovery[23]. Between 1990-1993, the real wage index considerably increased as a result of expansionary macro-economic policies, so did the unemployment rate (Figure 7)[24]. An inference that can be drawn for this period is that the democratization of political life associating itself with regaining strength of trade unions, changed the balance of power relations in favor of workers with a considerable increase in real wages during the period (Şenses, 1994; Koç, 1997).

The recent period after 1994 is grouped into four sub-periods; two of which belong to the crisis years (1994 and 2001) and the rest two refer to recovery years. In the first sub-period (1994-1997), real wage gains were reversed by the 1994 crisis without an increase in unemployment rate. Real wages faciliated labor market adjustment

[22] Since the impact of of the 1982 Constitution on the labor market is taken into account under the title of 'Union Flexibility', the explanations are confined to here.

[23] Trade unions regained the power in increasing the purchasing power of the wages of the unionized workers through the street demonstrations called "spring actions" during the local elections in March 1989 (Koç, 1997).

[24] Onaran (2004) observes a decline in unemployment rate with an increase in real wages during the period (with the exception of 1992). Accordingly, she finds a significant negative impact of unemployment rate on real unit labor costs for this period. The difference between the findings of Onaran and this thesis mainly comes from the inconsistency in data sources. This difference refrains the analysis from explaining real wage gains of the early 1990s by unemployment decreases.

without employment reduction, so unemployment rate was not adversely affected from the crisis. Şenses and Koyuncu (2004) also draw attention to the almost negligible effect of the crisis on unemployment rate. According to their survey based on the manufacturing sector, after the 1994 crisis the economy shrunk drastically, the real wage index fell by more than 30 points, whereas unemployment rate showed only a slight increase[25].

The second sub-period (1997-2000) was a recovery period in terms of real wages (except for 1999). During this period, unemployment rate did not demonstrate a decrease; rather we observe a slight increase (Figure 7).

The last crisis in 2001, on the other hand, has adversely affected labor market performance in terms of both wages and employment. After 2001, the real wage index in private sector exhibited a severe decline and since then has remained almost constant. This time, unemployment rate was also adversely affected by the crisis, and downward wage adjustment was associated with a remarkable increase in unemployment. As observed from Figure 7, the real wage index has just started to recover slightly, while unemployment rate has been fluctuating around 10% since 2001. Such a high level of unemployment rate reduces bargaining power of labor, and thus seems to have negative impact on real wage gains. Moreover, output growth has not had positive repercussions on employment rate as well as on labor earnings yet[26]. The jobless growth phenomenon shows that balance of power relations has still been working against workers.

Briefly, wage deterioration since the the post structural adjustment period has not accompanied unemployment decrease or employment growth. The correlation between wages and unemployment does not have a stable characteristic. Therefore, it

[25] This issue is generalized by the World Bank (2006:31): "…employers adjust to the changes in economic conditions not by hiring and firing, but rather through real wage adjustments. Both macroeconomic volatility and strong labor regulations encourage wage rather than employment adjustments".

[26] See Table 6 for GDP growth rates after 2001.

seems unlikely to claim the existence of a wage rigidity that hinders employment growth.

Labor market reforms suggesting greater flexibility were sucessfully implemented during structural adjustment period in Turkey. However, contrary to expectations the reforms have not yet translated into employment creation or significant reductions in unemployment rate. This process ended up being trapped in a "vicious cycle" of low wages, low accumulation and low growth in employment[27]. The practice showed that low wages did not create incentive for employment creation, which seems to contradict with the neoclassical theory suggesting that low employment rates result from wage rigidities (Onaran, 2002). Likewise, World Bank (2006) states that wage cost in Turkey does not constitute an impediment for employment creation; on the contrary, real wages in Turkey have kept labor costs internationally competitive. This implies that there is no strong relationship between low wages and employment growth.

The experience seems to contradict with the neoclassical theory in terms of both approaches it is based on. First, in developed countries where income is high, thanks to high capital and technology, wages and accordingly purchasing power of labor are also high, whereas in developing countries wages are lower due to low productivity capacity. As wages increase in line with the development process of economies, the share of labor is substantially higher in developed countries than in developing countries (Bulutay, 1995:66). The argument suggesting that the contribution of labor (wages) is a function of income opposes the claim regarding wages as a cost item. The second argument of neoclassical theory regarding work as a personal choice does not hold for the majority of the population in Turkey. Namely, one out of ten people is unemployed. Unemployment rate does not decrease with increases in education level: unemployment rate among the ones educated at highschool level has not declined below 13% since 2001, and the rate for university graduates fluctuates above 10%. The picture is more pessimistic considering new graduates. It is not enough to find a job when a person is ready to work. There might be some choice between

[27] The contradiction of Turkey's experience with the neoclassical view is comprehesively illustrated under the heading of 'wage trends in Turkey'. Here, the aim is to put forward the theoretical backround of the approach.

similar jobs such as to be employed in agriculture in the home-town and in informal sector in the city but not between work and leisure. Since people employed may prefer more leisure as a result of increase in welfare level, the direction of causality may also work from wages to leisure (Bulutay, 1999). Contrary to neoclassical argument, to be out of work is not the individual's discreationary preference.

Marxian reserve army of labor hypothesis proposes an alternative to the neoclassical theory to explain the cyclical relationship between wages and unemployment. The long-run trend of these variables helps to the hypothesis that the direction of the causality is rather from unemployment to wages. Considering the economic and political developments during different sub-periods makes the hypothesis much stronger. The analysis only covers wage and salary workers in manufacturing industry. However, including services sector into the analysis is unlikely to change the result; furthermore wage flexibility is expected to be much higher in this sector. Services sector[28] functions as a buffer in urban areas for unskilled workers in the structural change process (see Section 2.4.1). These workers, due to their low bargaining power are unlikely to have dominance in wage determination, even if they are covered by wage contracts. They are unskilled and they have substitutes in the market; namely, they represent the reserve army of labor. That a lot of people with the same qualifications are waiting to be hired reduces the bargaining power of the workers. They can not insist on higher wages, otherwise they are replaced with their substitutes. Accordingly, the existence of reserve army of labor puts downward pressure on wages (Onaran, 2002). The same result holds for labor moving out of agriculture as well. The un/low-skilled labor who can not be hired formally in urban areas tend to seek a job in informal sector due to the lack of unskilled vacancies in the formal sector. The link to wage flexibility appears at this point; those not to be

[28] The high skilled labor in the services sector does not take place in structural change process and it is beyond the scope of the debate. Here, services sector captures low skilled jobs excluding high qualified jobs such as financial services, medical services or professional services. It is difficult to classify employment as skilled and un/low-skilled. However, the profile of employment in services can be assessed by the economic activities they are occupied with. As of 2005, 7.8% of 11.3 million total employment in services were involved in activities related to financial institutions, mostly composing of skilled jobs. On the other hand, activites including construction, transportation and trade regarded as low-skilled jobs constituted 60.9% of total services employment. And, the rest of the total (31.1%) was employed in other services activities, which probably include both skilled and low skilled jobs. Considering high share of the "low skilled employment" in services sector, it may be concluded that wages are more likely to have downward flexibility and thus do not constitute hindrance for employment in services sector as well.

attached to the formal sector constitute excess supply of labor and enable wages to adjust downward.

Finally, one should note the role of first-time job seekers in the reserve army of labor. Even if the job seeker is a university graduate and high skilled, he/she faces difficulty in finding his/her first job. Unemployment rate among the young (aged 15-24 years-old) was 17.6% in 2005 when it was 10.3% on average. It is more meaningful to take a look at urban rates since most of the young population seek job in cities. The divergence gets wider in urban area where 11.9% of the labor force was unemployed. The share of the unemployed jumped to 21.7% in the young population (World Bank, 2006). That is to underline, newly university graduates despite their high qualification are likely to engage in jobs under their capacities, which makes finding job more difficult for the lower educated. Underutilization of skills is explained by the term "underemployment" which refers to the employment of high skilled workers in low-paid jobs not requiring such qualifications (see Chapter 2; footnote 6). They are obliged to get job under their capacities in the absence of high skilled vacancies. This reduces the bargaining power of the high- as well as the low-skilled labor. Furthermore, in such an environment where even highly qualified people face difficulties in finding jobs or they are employed in jobs under their capacity, it is not so realistic to support the argument regarding work as a personal choice.

Consequently, wage cost is a significant component in determining employment, but not the only and the most significant one. The main cause of low employment or high unemployment in Turkey should not be sought under wage rigidity, because wages are highly flexible. The findings can be summarized as follows: i) Rigidity is not observed in real wages in Turkey given the downward flexibility in the long-run; ii) There is not a stable negative correlation between wages and employment. That is, wage decreases have not translated into employment creation; iii) Reserve army of labor hypothesis[29] seems more appropriate for Turkey rather than neoclassical arguments to understand the relationship between unemployment and wages. The causality of the relationship between these variables should be from unemployment to

[29] The validity of reserve army of labor hypothesis is taken into account in the context of other flexibility indicators in the following sections as well.

the wages rather than the reverse; iv) High rates of unemployment decreases bargaining power of labor, and accordingly puts downward pressure on wages. In other words, the existence of excess supply of labor (reserve army of labor) increases wage flexibility[30].

3.3.1.1. The Role of Labor Market Segmentation in Wage Cost Flexibility

A multi-pronged approach to labor market study for Turkey needs to emphasize the fragmented structure of the market, which is considered to be one of the main sources of flexibility. The arguments regarding unemployment problem as an outcome of rigidities in the market is based on the assumption that there is only one labor market in which returns to education, experience and other variables are identical for all people (Özar, 1997). The link to wage flexibility appears when the assumption of 'homogenous' labor market is abolished; returns to labor would vary even regardless of their qualifications. The segments in the labor market (between men and women, large and small firms, protected and unprotected, unionized and nonunionized, and so on) are a kind of hidden means for downward wage adjustment. On the basis of the assumption that argue the more the market has a fragmented structure the higher the wage flexibility, this subsection tries to analyze to what extent Turkish labor market is fragmented. Here, the main focus is a wage differentiation among segments.

Table 10. Relative Earning of the Population with Income from Employment by Level of Educational Attainment for the Age Group 25-64, 2004

(upper secondary and post-secondary non-tertiary education=100)

	Czech Rep.	France	Germany	Hungary	Ireland	Korea	Poland	Portugal	Spain	UK	US
Below upper secondary	73	85	88	73	76	67	78	62	85	67	65
Tertiary	182	147	153	217	144	141	163	178	132	158	172

Source: OECD, 2006a.

[30] However, an assumption can not be made for the reverse; namely, low rates of unemployment do not lead wage increases because of low bargaining power of workers.

Education is mostly regarded as one of the main determinants of wage differentiation; the general rule is that low-educated people do worse than the high-educated. Of all OECD countries scheduled in the report of the OECD (2006a), relative earnings of adult population are the highest for the educated at tertiary level and the lowest for those below secondary education (Table 10)[31].

The existence of low-skilled workers increases wage flexibility as they constitute an important part of the reserve army of labor as discussed above. This is because the low-educated are mostly unprotected, and hence are exposed to the threat of dismissal which reduces their bargaining power to insist on higher wages. As long as they accept wage reductions, they are kept on working. This is what prevents the unemployment rate from going up. This argument is usually materialized during recessionary periods when workers, especially those with low level of educational attainment are faced with significant wage reductions. To illustrate, focusing on the last two crises occurred in 1994 and in 2001 the real wage index dropped by 18.3 and 24.1 points respectively in comparison with the year before. In the meantime, unemployment rates did not follow the same direction. In contrast to 2001 crisis in which unemployment rate has been affected as much severely as real wages, during the 1994 crisis labor market responsed to the adverse shock by adjusting wages rather than employment (Koyuncu and Şenses, 2004). Despite a severe wage cut, the rate of unemployment decreased by 1 percentage point between 1994-1995. This also holds for all levels of education with an exception of those educated at highschool level, whose unemployment rate showed a slight increase from 16.1% in 1993 to 16.4% in 1994, and then decreased to 14.6% in the following year (TURKSTAT, 2008).

It is true that the existence of low educated people is an incentive for employers to keep wages under control which increase wage flexibility. To this, it is worthy to underline that the theory assuming a homogenous labor market does not exclude

[31]OECD (2006a) does not present statistics of Turkey concerning relative earning of the adult population by educational level. However, it should not be misleading for the Turkish context to assume that higher educated are likely to earn relatively higher at least among wage and salary employees. According to the findings of Household Income Distribution survey in 1994, women earn 60% of men on average, and this rate decreases to around 42% as educational attainment declines (SPO, 2000).

wage disparities depending on the differences in educational attainment, but claims that there is no wage differentiation among the people with the same qualification. In this regard, the distinction according to educational levels is not counted as a separate segment.

According to a variant of neoclassical theory named as "convergenge hypothesis", there should not be important and persistent wage differentials among industries, firms and to some extent countries given the assumption of convergence to the same marginal productivity of a worker everywhere[32]. Even if disparities occur in productivities or in wages, they should have disappeared by way of free movement of factors across sectors (Bulutay, 1997). This approach considers wages as a personal choice that workers choose their jobs according to their comparative advantage and move among jobs where they would earn the highest wage. However, in practice it is not so easy for workers to find the highest-paying job.

Given the pervasive wage differentiation even in the same industry among workers with the same measurable characteristics, instead of neo-classical approach, dualistic version of the Labor Market Segmentation (LMS) theory seems more realistic to understand the structure of the labor market. LMS describes a 'heterogeneous' labor market based on two distinct sectors: "The primary (or upper) segment boasts high wages, good working conditions and employment stability. By contrast, the secondary (or lower) segment is characterized by low wages, poor working conditions and employment instability" (Ercan, 1997:89). LMS theory conflicts with the argument putting up wage equalization through mobilization of workers across segments. The theory underlines the existence of barriers refraining workers from moving freely, such that:

[32] Bulutay (1995) discusses the validity of neoclassical competitive theory. According to this theory, wage differentials result from unobservable or unmeasurable differences; i) in the nature of work being done, or ii) in the quality of the workers. Bulutay does not deny the importance of these factors in wage differentiation; however he does not consider them as the main cause of wage differentiation in Turkey. According to the empirical results; even if the individual factors such as education, experience, occupation, sex, race etc. are controlled for, there are still great differences in wages across industries. He avoids giving decisive roles to unobservable individual factors in contrast what neoclassical competitive theory offers. Keeping in mind the role of individual factors in wage determination and accordingly in wages disparities, testing its validity is beyond the scope of this study.

> "If there were no barriers, workers in the low wage sector would enter the high wage sector and force the wages in that sector down until wages across sectors were equalised. In this way, differences between segments would disappear as workers move from one segment to the other" (Özar, 1997:133).

This subsection does not intend to test of the labor market segmentation theory, but intends to provide an overview of wage disparities between different segments of the Turkish labor market in Ercan and Tunalı (1997). Using the data from TURKSTAT (Household Labor Force Statistics), labor market outcomes of wage earners are compared in terms of gender, firm-size[33] and formal/informal sector.

- **Distinction between Male and Female Labor Force**

There are large differences between male and female wages, although the differentiation diminishes as women become higher-educated and skilled. The gender gap narrowed over the years: while female average earning was as much as 60% of male in 1994, it rose to almost 90% in 2001 (SPO, 2000; SSI, 2001). Yet, according to the results of Social Security Institution Statistical Yearbook, male earnings were 12 % higher than female earnings on average in 27 out of 32 subsectors as of 2001. In most of the subsectors, except these hiring high-skilled female labor such as services related to financial institutions, trade or entartainment, the gender earnings gap ranged between 3% and 38% (SSI, 2001). The gap was the widest among agricultural workers. Female workers earned 39% of men in the agricultural sector as of 1999. Regardless of sectoral distinction, the gap closes as education level increased; the difference between earnings of men and women among university graduates was 24% in public sector and 32% in private sector (SPO, 2000).

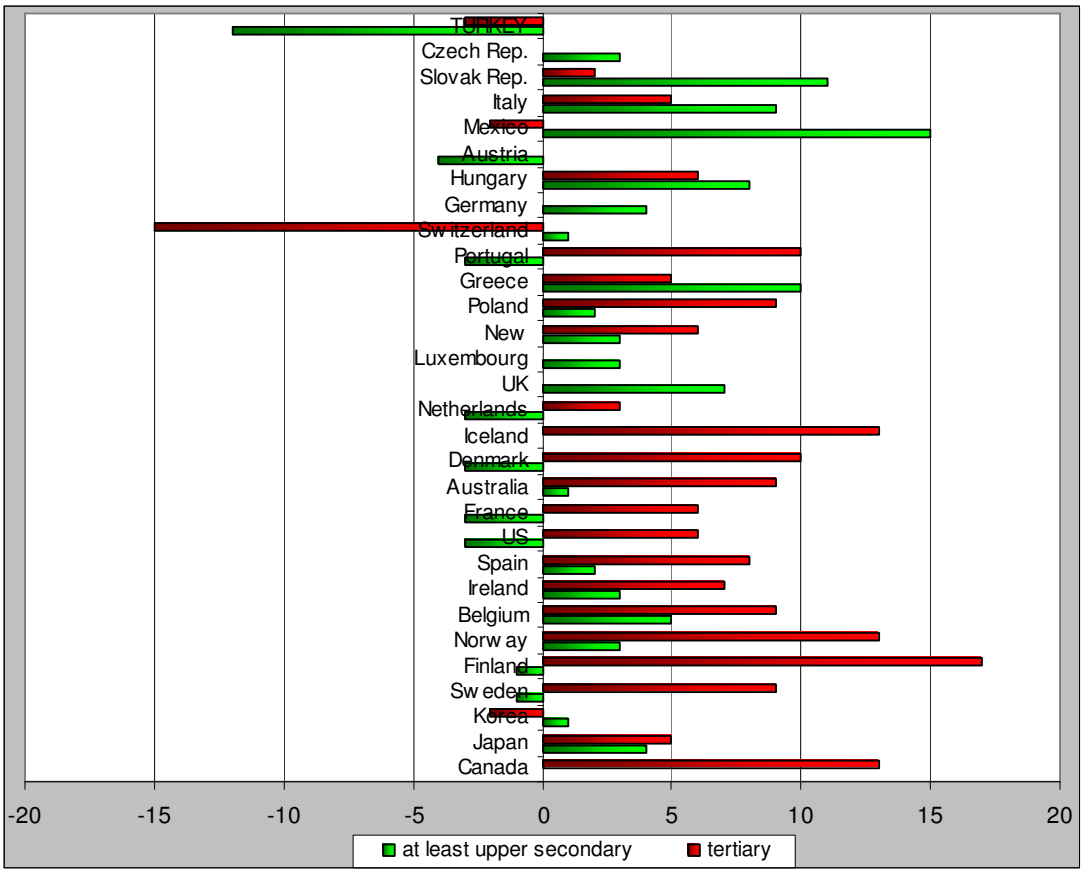
Relatively low wages of women[34] can partly be explained by their lower qualifications comparing with men. Women still have less formal schooling and

[33] In relation to firm-size, there is wage differentiation between inter- and intra-industry other than large and small firms. However, this type of disparity is not much related with labor market segmentation, that is why it is beyond the scope of this paper (See Bulutay, 1995 for detailed information).

[34] Ercan and Tunalı (1997:100) state that men earn higher wages than women with one exception. The exception occurs in the case of part-time workers: the hourly wage of females calculated from annual earnings in large firms is higher.

training despite a considerable progress since the last decade. It is to the point to take a brief look at the gender difference in terms of educational attainment. Figure 8 depicts a gender difference in educational attainment in favor of men. Educational attainment of female population is higher than that of men in more than half of the OECD countries, except for Turkey where female and male educational attainment rates are the lowest in terms of each educational level among all countries in the sample. The difference between women (of 9%) and men (of 12%) gets closer at the level of tertiary education. Table 11, translating the picture in Figure 8 into numerical data, portrays the educational profile of the population aged between 25-34 that has attained at least upper secondary education; while 27% of the women and 39% of the men were educated at least upper secondary level in 2004, 9% of female and 12% of male received tertiary education.

Figure 8. Gender Difference in Educational Attainment for the Age Group 25-34 (as a Percentage of Total Population), 2004



Source: OECD, 2006a.

As a result of lower educational level, women are mostly employed in lower-skilled and lower-paid jobs. Women usually have less work experience due to their responsibilities at home. Apart from their disadvantageous position, they are generally treated unequally in work places irrespective of their qualifications (Bulutay, 1995; Tunalı, 2003). There is a male dominant view which believes women can not be as successful as men especially in executive decisions, though they are at least as much qualified as men. For instance, women are generally not assigned as the director general of a bank or do not take place in bank supervisory commission.

To understand the gender gap among wages, it would be helpful to take into account the probable impact of structural transition process on female wages. Workers migrating out of agriculture constitute a considerable part of surplus labor in urban areas, and that surplus reduces wages due to low bargaining power of labor, mostly of the unskilled. As indicated during the discussion on Marxian conception of reserve army of labor, women who are deemed as the main source of reserve army are less luckier during the transition period (see Section 2.4.1). Women are less adaptable to changes in skill requirement due to their responsibilities for housework and childcare. That is why men can more easily find jobs than women although they are both endowed with the same qualifications (Onaran, 2004; Tunalı, 2003). Consequently, structural transition has a widening-effect on wage differentiation against women. Some women are obliged to exit from labor force and some others have to accept relatively low-paid jobs. The disadvantageous position of women lowers their bargaining power in favor of men; and accordingly increases wage flexibility by creating segmentation.

Table 11. Percentage of Population That Has Attained at Least Upper Secondary and Tertiary Education for the Age Group 25-34, by Gender, 2004

	At least Upper Secondary		Tertiary	
	Female	Male	Female	Male
Korea	97	97	48	50
Japan	96	92	54	49
Norway	96	95	46	33
Slovak Rep.	93	94	15	13
Czech Rep.	93	94	13	13
Sweden	93	90	47	38
Finland	92	87	47	30
Canada	92	89	60	47
US	88	86	42	36
Switzerland	87	90	23	38
Austria	86	89	20	20
New Zealand	85	84	31	25
Denmark	85	88	40	30
Hungary	84	84	22	16
Germany	84	87	23	23
Ireland	83	76	44	37
France	82	79	41	35
Belgium	81	78	45	36
Netherlands	81	79	36	33
Greece	78	68	27	22
Australia	75	78	41	32
Luxembourg	74	73	31	31
Iceland	70	66	38	25
Italy	68	60	17	12
UK	68	72	35	35
Poland	68	53	28	19
Spain	66	57	42	34
Portugal	46	35	24	14
Mexico	27	24	18	20
Turkey	27	39	9	12
OECD average	78	76	34	29

Source: OECD, 2006a.

- **Distinction between Small and Large Establishments**

Dualistic version of the labor market segmentation theory relates the primary sector to large firms and secondary sector to small firms. There are several justifications of the argument that wages are usually higher in larger firms and in firms with higher capital/labor ratios. For instance, Ercan and Tunalı (1997) find statistical significance in wage differentials in favor of employees in large firms over those in small firms. As of 1996, hourly wages in large firms are 18-25% higher than those in small firms[35]. Likewise, Bulutay (1995) shows the determining role of firm-size in wage differentiation. According to his results, wages in firms employing more than 100 workers are 2.56-3.02 times higher than wages in firms employing 10-24 workers. The findings are consistent with each other; namely, wages in larger firms are higher at every level of firm size, but the rate of increase decreases as the firm size extends to 500 or more workers.

Higher wages in large firms generally result from their greater ability to pay (thanks to returns to scale and cost advantage due to mass production etc.). Not only labor cost but also social security coverage and other benefits are usually higher in large firms. Large firms overcome the labor cost by hiring more qualified workers as well as positive returns to scale so as to adjust to the changes in the production system and in the working conditions more easily. The workers in large firms are generally more productive[36], high-skilled and thereby more highly-paid, even above market wages in order not to be discouraged by shirking, absteeism and other forms of disloyalty (Ercan and Tunalı, 1997). In contrast, small firms are unlikely to have incentive for workers to become more qualified and to have ability to adopt new technological or other forms of changes in production system.

[35] In relation to the segmentation in terms of firm-size, the distinction between public and private sectors may be taken into account; e.g. Bulutay (1995) states that firm size in the public sector is much larger than in the private sector. He links wage disperaties between public and private sector to firm size. This issue is beyond the scope of this study as it is not aimed to investigate all dimensions of segmentation; but to examine segmentation in terms of directly related issues to flexibility.

[36] As in common view, there is a close relation between productivity and wages. Wages are higher in firms with higher productivity. Since productivity increases with the increase in firm size, wages in larger firms are higher relative to small firms. As a result, firm size is a determining factor in wage differentiation. See Bulutay (1995) for the correlation of wages and productivity.

Ercan and Tunalı (1997) further argue that workers in large firms are more likely to be unionized. Therefore, the balance of power relations is expected to be in favor of the workers in large firms, where union density is higher relative to the small firms. With regard to the wage gap between unionized and non-unionized workers, average monthly wages of non-unionized workers were 53% of the unionized as of 2005 (Şafak, 2006). This partly explains the origin of wage differentiation between large and small establishments. Similarly, centralized wage setting is more prevalent in large firms, which decreases responsiveness of wages to demand changes. On the other hand, wages in small firms are more adjustale to adverse shocks which increases wage flexibity in the labor market. That is to say, labor market segmentation increases labor cost flexibility by differentiating wages between large and small firms.

Labor market outcomes of the segmentation in terms of firm size is not only through creating wage differentiation but also through creating distinction between protected and unprotected work or in terms of working hours etc. Ercan and Tunalı (1997) find that more than 25% of total wage and salary workers were unprotected; 16% of those work in large firms, whereas over 57% are in small firms[37].

Within the contex of firm-size distinction, it is worthy of note that women accounting for 31.2% of the full time wage-salary earners are more likely to work in large firms. Female representation is even much higher among part-time workers (34.1% in large firms and 32.7% in small firms in 1996) because of their burden inside the home. The reason why women concentrate in large firms is the fact that those with higher education are more likely to attach to the labor force and concentrate in white collar

[37] Ercan and Tunalı (1997) examine the data from Oct.-88 HLFS and report weighted means on the subsample of wage salary workers. The cut off point is 10 workers, more than which refers to large firms. They define part-time workers as people who normally work less than 40 hours per week. Prime-age workers refer to the age group of 20-54 years. In the case of working hours within the context of full-time jobs, Ercan and Tunalı report that workers in small firms work longer hours than workers in large firms. Although the duration of work is longer in small firms, they work relatively few days per month and per year. It seems that overtime work is a common behaviour in small firms because of the less organized structure of working conditions. If hourly wages, working hours or social protection coverage are taken as a signal of bad jobs, it can be concluded that bad jobs are concentrated in small firms rather than in large firms.

jobs[38] which mostly take place in large firms. In case of years of education, average duration of educational attainment of full-time women in large firms is 2.5 years more than the duration in small firms, and the difference is 6.5 years for part-time female workers. Men in large firms are also higher educated than those in small firms (Tunalı and Ercan, 1997). To sum up, small establishments which constitute the secondary

Overall dualistic characteristic of the labor market is also embodied in the distinction between **formal** and **informal** sector. On the one side, relatively higher wages, there are jobs with better working conditions, higher skill endowment, higher productivity and higher accession to social protection instruments; and on the other side workers are in a worse position mostly in low paid jobs with longer working hours without additional pay, with less productivity and without coverage by any formal protection (Ercan, 1997). Since access to formal labor market instruments are provided for registered workers, employees in informal sector are excluded from social security coverage, collective wage agreements, working time arrangements, and so on. Although there is no consensus on whether informal sector refers to unrecorded sector, regardless of those discussions the share of unrecorded workers is used to illustrate the size of informal sector. The proportion of unregistered workers was 48.5% in total employment and 33.9% in non-agricultural employment in 2006 (Ankara Ticaret Odası, 2007). This indicates that approximately half of the total employment and one third of the non-agricultural employment is devoid of bargaining power consent to work with lower wages, even without any fringe benefits. As it is expected, non-coverage is a prevalent behaviour among the unpaid family workers, casual employees and self-employed, especially in rural areas[39]. Coverage is relatively lower in rural areas; two thirds of rural employment and one third of urban employment is unrecorded which represent one of the main sources of reserve army of labor (World Bank, 2006).

[38] As oppsed to the women mostly holding "bad" jobs in the secondary sector, this section delals with the women with white-collar jobs. The arguments regarding these two groups do not conflict with each other since the first group represents the unskilled unproductive agricultural workers, while the latter group refers to the high skilled and productive wage and salary workers.

[39] Recall Table 5 for agricultural employment by status.

In this context, World Bank (2006: 69) examines the correlation of social security coverage, union membership and employment in workplace with 10 or more workers with each other, and reveals that "workers who are covered under one formal protection instrument tend to be covered under others, while some workers have no coverage at all". This result is consistent with the findings about labor market segmentation theory presented above. That is, men with higher educational level disproportionately concentrate in jobs with formal protection instruments, especially in large establishments.

Table 12. Worker Acess to Formal Protection Instruments, 2002 (percent of workers with access)

	Trade union members	Social Security	Workplace of 10+ employees
Males	12,8	50,9	34,2
Females	7,4	24,7	19,4
Primary or less	7,8	29,6	18,8
High school	13,8	63,9	45,8
Higher education	20,4	87,2	70,7
All workers	11,7	42,4	29,4

Source: World Bank, 2006.

The large proportion of the low-skilled in the unrecorded employment implies why they are attributable to the secondary sector. Not surprisingly, the main source of informal employment emanates from the low productive labor force. Social security coverage is highest among university graduates, and the coverage declines while getting down the steps in educational attainment. Individuals educated at primary or less level are the most disadvantageous group of all in terms of social security coverage. Their share in union membership and large establisments are the lowest as well. It indicates high correlation between educational level of the labor force and access to social protection instruments, employment in small establishments, or engagement in overtime work (Table 12).

In conclusion, the fragmented structure is one of the distinctive characteristics of the Turkish labor market. Labor market segmentation is concomitant for flexibility, especially in terms of labor cost and numerical flexibility. Highly paid jobs, high skilled and regular employment, and higher accession to social protection instruments including fringe (non-wage) benefits and unemployment insurance are on the one side, which represent the rigid character of the labor market. The other side, however, constitutes flexible part of the market eases adaptability of the labor to demand changes through wage adjustment, flexible working hours, non-standard forms of employment arrangements and uncovered labor, and so on.

3.3.2. Non-Wage Cost Flexibilitity

Employers' payments to the employees cover nonwage components (fringe benefits) in addition to wage cost. Accordingly, labor cost consists of employers' and employees' social security contributions, unemployment insurance, severance pay, notification indemnity apart from earnings including wages and salaries[40], bonuses, premiums and social benefits (Bulutay, 1995; Togan and Özyıldırım, 1997). To simplify, labor cost may be decomposed into three elements: net wages, income tax (including stamp duty), nonwage payments of employers and employees such as Social Security Institution (SSI) contributions, unemployment insurance compensation and such premiums (see Table 13)[41]. In order to decrease labor cost with a view to increase labor demand, one of these components should be reduced. Reducing wages is not a supportable policy in terms of social justice; and decrease in net wages reduces domestic demand and affects output growth adversely in the long run (TIBA, 2002). Besides, real wages in Turkey has already presented downward

[40] Wages and salaries are composed of two main components: basic wages and salaries including direct payments to employees in respect of public holidays, annual vacations and all other remuneration for time not worked (excluding severance pay), and supplementary payments, such as overtime payments, compensation for special skills and works (Bulutay, 1995).

[41] "Net wage" refers to the wage received by workers after all deductions, including overtime payments, bonuses and premiums, payments in kind, etc. The sum of net wage, income tax (including stamp tax), employee's unemployment insurance and social security contributions is called "gross wage". And "labor cost" is equal to gross wage plus employer's social security contributions and other payments by the employer related to employment (saving fund and housing fund payments, unemployment insurance, etc.).

flexibility over the last two decades as mentioned in the previous section. For these reasons, reduction in non-wage cost has recently received considerable attention by policy makers.

Nonwage costs refer to the compensation not related to actual working hours, including mainly income tax on wages and social security contributions of employees and employers (Bulutay, 1998; Ercan, 1998). They create a wedge between the cost to the employer of hiring an employee and the wage received by the employee (take-home pay). As a result labor cost incurred by employers increases and employers become willing to rely on overtime work rather than hiring new workers (Brodsky, 1994; OECD, 1994). The effects of nonwage costs on total labor cost and employment have received considerable attention in labor economics. It is claimed by a number of national and international surveys that high nonwage costs are one of the main causes of the poor employment performance in Turkey as in the case of many developed and developing countries (OECD, 1994; OECD, 2007a; TCEA, 2006a; TIBA, 2004; World Bank, 2006). In order to assess the burden of nonwage costs on the labor market, this thesis sheds light on the impact of nonwage costs on labor demand. It is analyzed whether labor taxes are at such a high level that prevents employers from hiring additional employees[42].

In this thesis, nonwage payments of employers and employees are those called taxes on labor (payroll taxes)[43]. While employers' contributions of labor taxes are compiled in detailed by manufacturing industry statistics of TURKSTAT,

[42] The other charge on employers taking as much stress due to its adverse effects on employment creation is severance pay, which is not covered by labor taxes. Since this nonwage component is held seperately in subsection titled 'external numerical flexibility' as an item of EPL, it is not discussed here. Likewise, unemployment insurance which is at the same time an element of labor taxes is focused on during the discussions about 'unemployment flexibility'. Other elements, however, are of little importance and do not take a particular emhasis as is the case of related studies (i.e. Bulutay, 1995; Ercan, 1998; Şenses, 1994; Togan and Özyıldırım, 1997; TIBA, 2004; Wold Bank, 2006, etc.)

[43] The concept of "labor tax" is used in the parallel meaning with "payroll taxes" unless otherwise stated. The terms refer to all social security witholdings on wages and salaries consisting of employers' and employees' contributions such as SSI premiums and unemployment insurance compensation, and all taxes on wages/labor . If the coverage of payroll taxes is taken as so, payroll taxes in Turkey constituting around 70% of the overall levy and tax wedge become the major financial instrument of the social insurance programs. The combined employer-employee contributions account for the largest portion of payrolls, ranging between 35.5%-41% (20% for pensions and related insurance; 11% for sickness and maternity; 3% for unmeployment insurance; 1.5% to 7% for work injuries) (World Bank, 2006). However, tax wedge only covers income tax plus social security contributions of employers and employees.

employees' contributions are not itemized, and captured by gross wage data (TIBA, 2004). According to this decomposition, the share of employers' payments accounted for around 20% of total labor cost in 2002, furthermore it exceeded 30% in some establishments. Although it is unlikely to examine figures in terms of employees' social security contributions and income tax item by item through this data source, including these two elements into the analysis is expected to increase the weight of taxes on labor to 40%-60%. Extending the analysis to cover services sector, the impact of taxes on labor would probably be found much higher because the share of labor cost in total cost is relatively higher in such labor intensive sectors (TIBA, 2004). Given the lack of current and comprehensive national data in terms of labor tax components, OECD surveys are relied on as the main reference for the discussions conducted in this subsection, especially for comparisons with other countries.

As mentioned above, nonwage costs produce a gap between the cost of labor to the employer and take-home pay of the employee (Bulutay, 1998). "Net wage as percentage of total labor" cost may imply the financial burden of nonwage costs on employers. It is calculated by subtracting the funds not paid to the worker (i.e. defence industry encouragement fund, incentive for social assisstance and solidarity fund, apprenticeship and vocational training fund, housing fund, sports center fund, compulsory savings fund), the income and related taxes and employee's social security premiums from total labor cost (Özyıldırım and Togan, 1997:153). Note in Table 13 that total labor cost is not the amount obtained by employees; rather it is the cost of labor to employers. Deduction rate from gross wage accounting for 21.4% of total labor cost indicates the nonwage payments of employees to the government. The deductions from gross wages are composed of employee's contribution to SSI premiums and unemployment insurance fund, income tax and stamp tax. Net wage accounting for 52.6% of total labor cost is calculated by substracting the deduction rate of 21.4% from the proportion of gross wage of 74% as of 2005.

Table 13. A Detailed Presentation of Labor Cost in terms of Payments* to the Government and to Employees, 2005

		YTL/hour	%
1	Basic wage	4,41	36,6
2	Wages for weekends and official holidays	0,98	8,1
3	Permit wage	0,35	2,9
4	Bonus, premium, etc.	1,98	16,4
5	Social benefits[a]	1,21	10,0
	GROSS FLAT WAGES (1-5)	8,93	74,0
6	Employer's social security contributions (SSI premiums)	1,92	15,9
7	Employer's contribution to unemployment insurance compensation	0,20	1,7
8	Other	0,06	0,5
	PAYMENTS BY EMPLOYER TO THE GOVERNMENT (6-8)	2,18	18,1
9	Severance pay	0,63	5,3
10	Notice Indemnity	0,08	0,7
11	Expenditures on work clothes and other equipments related to work	0,15	1,2
12	Other	0,09	0,7
	OTHER EXPENDITURES RELATED TO LABOR (9-12)	0,95	7,9
	TOTAL LABOR COST (1-12) [b]	**12,06**	**100,0**
	DEDUCTIONS FROM GROSS WAGE TO THE GOVERNMENT (13-16)	2,58	21,4
13	Employee's social security contributions (SSI premiums)	1,25	10,4
14	Employee's contribution to unemployment insurance compensation	0,09	0,7
15	Income tax	1,19	9,9
16	Stamp tax	0,05	0,4
	NET FLAT WAGE [c]	6,35	52,6

* Payments are calculated on the basis of actual hours worked in 2005.
(a) "Social benefits" that are accrued by the employees include support for food, heating, transportation; holiday pay; financial support for families, children and education; birth, death, marriage and other social welfare benefits.
(b) Excluding over-time pay.
(c) Allowance for special expenditures is included, yet repayment of the principal of the obligatory savings fund is excluded.

Source: TCEA, 2006a.

While deductions from gross wage point out nonwage payments of employees to the government, "deduction rate from labor cost" to reach net wages is rather appropriate measure to show total weight of nonwage costs. According to the calculations of TCEA, the deduction rate was 35.8% in 1985, which means only 64.2% of total labor cost was received by workers. The deduction rate jumped to 47.3% in 2005. That

means the financial burden of nonwage components have increased over the years with a drop in the share of net wages (Table 14). This trend may be observed through the net wage index. Besides, the government received 39.5% of total labor cost in 2005 by means of taxes or any other way. The rest of deductions including severance pay, notice indemnity and business related expenditures accounted for 7.9% of total labor cost. That amount, despite being components of nonwage cost, was neither paid to government nor received by employees (TCEA, 2006a).

Table 14. Labor Cost, Wages and Deductions: 1985-2005

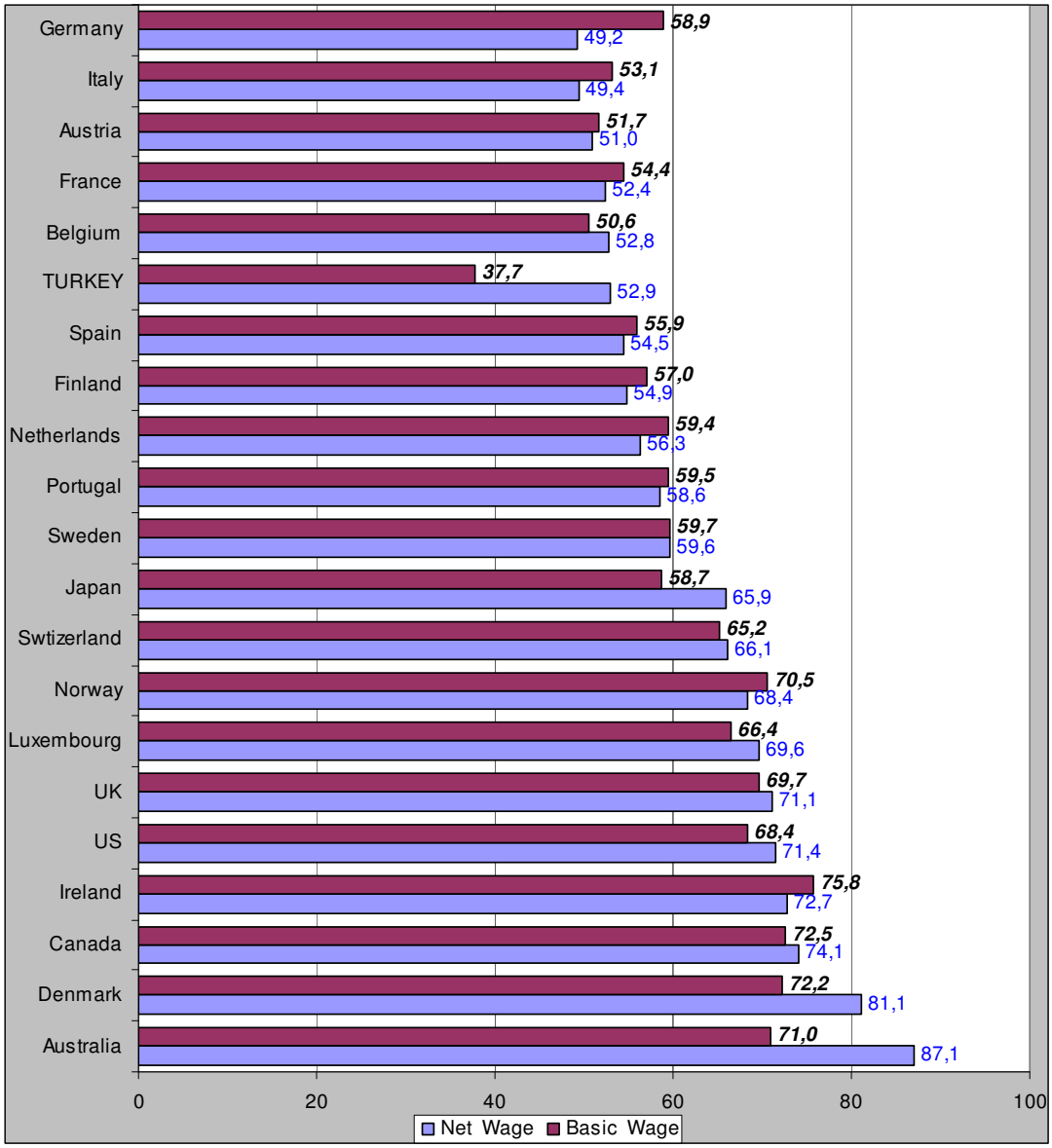
	Labor Cost (TL/hour)	Net Flat Wage (TL/hour)	Net Wages/ Labor Cost (%)	Deductions from Labor Cost (TL/hour)	Real Labor Cost Index 1985=100	Index of Net Real Flat Wage 1985=100
1985	808	519	64,2	35,8	100	100
1990	11.082	5.409	48,8	51,2	154	117
1995	195.825	111.865	57,1	42,9	145	129
2000	4.118.843	2.311.497	56,1	43,9	193	169
2005*	12,06	6,35	52,7	47,3	169	138

* Currency unit is New Turkish Liras (TRY)

Source: TCEA, 2006a.

Comparing the ratio of net wages to total labor cost within the OECD countries; Turkey (with 52.9% in 2004) ranked the 6th lowest. The ratio ranges between 87.1% for Australia to 49.2% for Germany. The EU average is 10.5 points higher than that of Turkey, although five of the member states got behind (Figure 9).

Figure 9. Proportion of Net and Basic Wages* in Total Labor Cost, by Countries, 2004



* Countries ranked by increasing net wage.

Source: TCEA, 2004; TCEA, 2006b.

In relation, a brief look may be taken on basic wages which refers to the payment for time worked or work done. Considering the share of basic wages in total labor cost, the picture is more pessimistic. Turkey was ranking the lowest with 37.7% in 2004. These figures on the one hand depict the low share of wages in total labor cost; on the other hand, show that wage cost in Turkey is internationally competitive.

Another commonly used indicator to measure the weight of nonwage costs is "tax wedge". The measure is calculated as the ratio of income taxes plus employer's and employee's social security contributions to total labor cost (OECD, 2007b). It actually indicates the difference between after-tax wage of an employee and total cost of his/her employment. Note that employer's and employee's contributions to unemployment insurance fund and stamp tax are not included in the calculation of tax wedge, although they are counted as the components of taxes on labor[44]. Tax wedge in Turkey was 42.7% as of 2007. The distribution of its components is income tax accounting for 12.6% of the wedge, employees' social security contributions of 12.3% and those of employers of 17.7%.

The largest portion of the financial burden of taxes is incurred by employers in half of the OECD countries as in the case of Turkey (including Belgium, Austria, France, Switzerland, Korea, Japan, Finland, Greece, Spain, Ireland, Portugal, Czech Republic, Hungary, Slovak Republic and Mexico). For the rest of the OECD countries, income taxes constitute the major financial instrument of their social insurance systems, except for Netherlands and Poland where employees' contributions account for the largest share.

The elements of tax wedge fluctuate in a wide range among the countries depending on "the differing priorities of governments and voters in different countries with respect to the desried level, composition and financing method of government expenses, including social benefits" (OECD, 2007a:1). For instance, the tax wedge for single workers without children, at average earnings levels, varied widely across OECD countries. The tax wedge exceeded 50% in Belgium, Germany, Hungary and France and was lower than 19% in Korea and Mexico as of 2006. The ranging was between 3,1% (in Mexico and Korea) and 30,1% (in Denmark) for income taxes; between 0% (in New Zealand and Australia) and 21,4% (in Poland) for social security contributions of employees and between 0% (in New Zealand) and 29,7% (in France) for those of employers (OECD, 2007b) (Table 15).

[44] See Appendix A for the calculation of tax wedge on the basis of minimum wage in Turkey.

Table 15. Proportions of Tax Wedge Components in Labor Cost, 2006 (Single Persons without Children at the Average Wage Level)

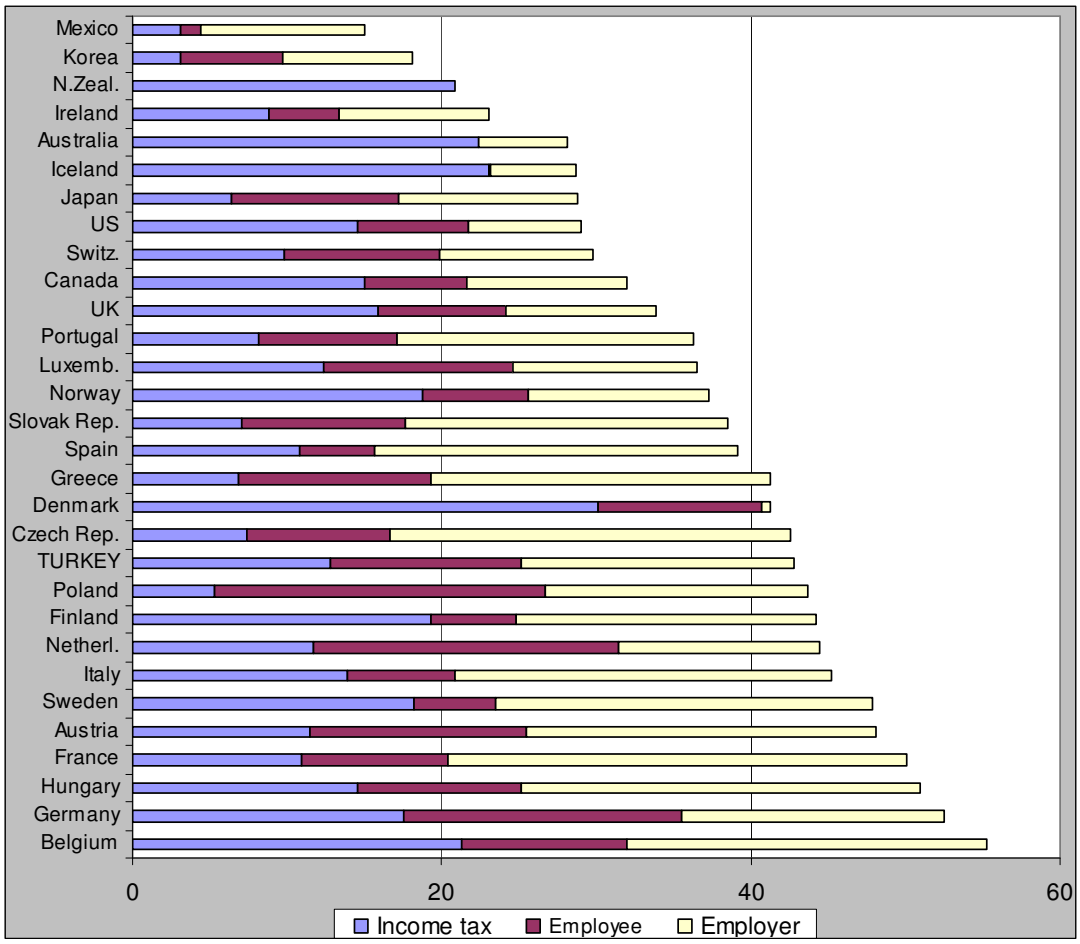
	Total tax wedge	Income tax	Employee	Employer	Labor costs[a]
	(1)	(2)	(3)	(4)	(5)
UK	33,9	15,9	8,3	9,7	55.171
Belgium	55,4	21,3	10,7	23,3	54.896
Germany	52,5	17,5	18,0	17,0	54.129
Austria	48,1	11,5	14,0	22,6	51.075
Luxembourg	36,5	12,3	12,3	11,9	49.944
France	50,2	10,9	9,5	29,7	49.813
Netherlands	44,4	11,7	19,7	13,0	48.986
Sweden	47,9	18,2	5,3	24,4	46.396
Switzerland	29,7	9,8	10,0	10,0	46.196
Norway	37,3	18,7	6,9	11,7	45.337
Finland	44,1	19,3	5,5	19,4	44.693
Japan	28,8	6,4	10,8	11,6	44.469
Korea	18,1	3,1	6,6	8,4	43.729
Australia	28,1	22,4	0,0	5,7	40.770
Greece	41,2	6,8	12,5	21,9	39.243
Denmark	41,3	30,1	10,6	0,6	38.956
Iceland	28,6	23,0	0,2	5,5	36.775
Italy	45,2	13,9	7,0	24,3	36.585
Canada	32,1	15,0	6,6	10,4	36.137
Spain	39,1	10,8	4,9	23,4	35.209
US	28,9	14,6	7,1	7,3	35.045
Ireland	23,1	8,8	4,6	9,7	32.945
New Zealand	20,9	20,9	0,0	0,0	28.346
Portugal	36,3	8,2	8,9	19,2	25.849
Turkey	42,8	12,8	12,3	17,7	24.993
Czech Rep.	42,6	7,4	9,3	25,9	21.777
Hungary	51,0	14,6	10,6	25,8	19.685
Poland	43,7	5,3	21,4	17,0	19.130
Slovak Rep.	38,5	7,1	10,6	20,8	16.828
Mexico	15,0	3,1	1,3	10,6	11.026

* Countries ranked by decreasing labor costs.

(a) Dollars with equal purchasing power

Source: OECD, 2007b.

Figure 10. Income Tax Plus Employees' and Employers' Social Security Contributions in OECD countries (as % of Labor Costs), 2006 (Single Persons without Children at the Average Wage Level)



* Countries ranked by increasing tax wedge

Source: OECD, 2007b.

While average tax wedge in most of the OECD countries varies depending on marital status, presence of children or earning level, Turkey's average tax wedge remains constant, hence its rank varies accordingly. World Bank (2006) presents average tax wedges for the OECD-30 and the OECD-9 middle-income subgroup by family type and wage level on the basis of OECD's calculation. Turkey's taxes on labor rank relatively lower concerning singles and couples with no children, whereas it has the highest tax burden on labor in the cases of singles and families with children, so does it for low wage workers with or without children. Turkey's tax policy regardless of earning level indicate that taxes are not used as a social policy instrument in Turkey in contrast to in OECD countries, where tax burden on labor is reduced as income

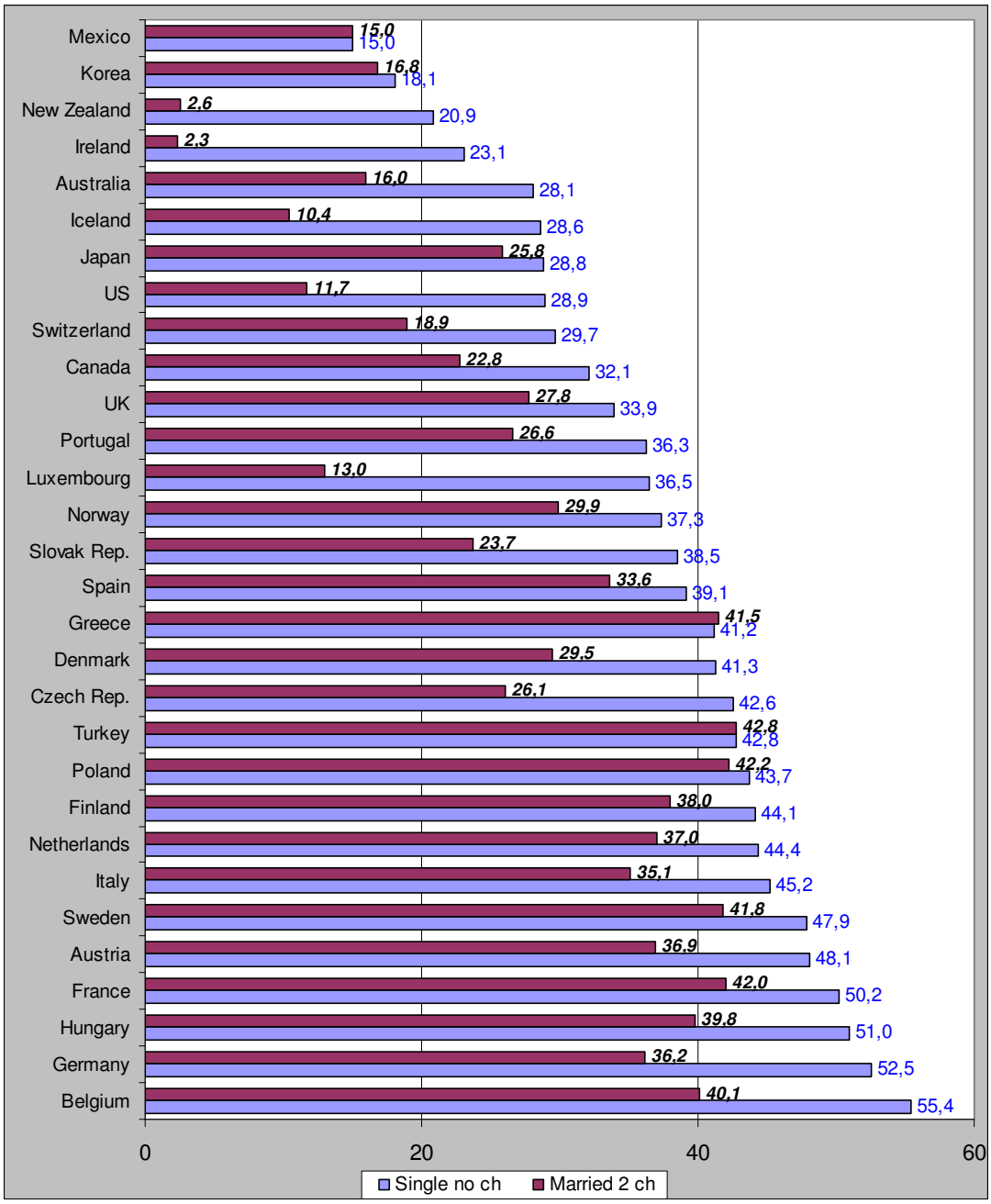
level decreases and the family size increases. This situation creates a disincentive for employment of low-skilled workers and thus leads the market towards informalization (World Bank, 2006).

To illustrate, the OECD average for single persons without children tax wedge on average earnings was about 37.5% in 2006; however, it highly exceeds the average in Austria, Belgium, France, Germany, Hungary, Italy and Sweden of more than 45%. At the bottom end of the range, Mexico, Korea and New Zealand took place with 15%, 18.1% and 20.9%, respectively. The tax wedge of Turkey for this family type was 42.8% which was ranging on average of the EU-15 (OECD, 2007a) (Figure 10). For a one-earner family with two children, by contrast, Turkey ranked the highest with the constant rate of 42.8%. This is because most of OECD countries grant cash benefits and/or more advantegeous tax treatment to the families with children, accordingly tax wedge falls as the family gets cluttered (OECD, 2007b). The tax wedge for the two-child family ranged from 42.8% in Turkey, 42.2% in Poland and 42% in France to 2.3% in Ireland, 2.6% in New Zealand and 10.4% in Iceland.

Including different wage levels into the analysis, Turkey had the highest score for single partner with two children earning 67% of the average wage level as is the case of one-earner married couple with two children at average wage level. Turkey's score ranks relatively lower over the average wage level. To sum up, considering the share of income tax plus employers' and employees' contributions in total labor cost, as of 2006 among OECD countries, Turkey ranks:

- 8th for single persons without children, earning 67% of the average wage
- 11$^{th\ for}$ single persons without children, earning the average wage
- 14th for single persons without children, earning 167% of the average wage
- 1th for single persons with two children, earning 67% of the average wage
- 1th for one-earner married couple with two children, earning the average wage
- 2nd for two-earner married couple with two children, earning 33% of the average wage
- 6th for two-earner married couple with two children, earning 67% of the average wage
- 8th for two-earner married couple without children, earning 33% of the average wage

Figure 11. Comparison of Tax Wedge[a] of 'Single Persons without Children' with 'One-earner Married Couple with Two Children' on Average Earnings across OECD Countries (as % of Labor Costs[a]), 2006



* Countries ranked by increasing tax wedge
(a) excluding cash benefits

Source: OECD, 2007a.

Table 16. Tax Wedges by Family Type and Wage Level, 2006

Family type	Single no ch	Single no ch	Single no ch	Single 2 ch	Married 2 ch	Married 2 ch	Married 2 ch	Married no ch
Wage level (% of Average wage)	67	100	167	67	100-0	100-33[b]	100-67[b]	100-33[b]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Australia	24,4	28,1	34,3	-5,3	16,0	20,1	22,8	24,8
Austria	43,5	48,1	50,7	26,7	36,9	37,7	40,4	45,0
Belgium	49,1	55,4	60,7	35,0	40,1	41,0	48,0	47,6
Canada	27,6	32,1	33,3	1,6	22,8	26,2	29,1	29,1
Czech Rep.	40,1	42,6	46,1	19,3	26,1	33,6	37,8	41,0
Denmark	39,3	41,3	49,5	13,6	29,5	34,4	36,1	39,4
Finland	38,9	44,1	49,9	26,7	38,0	36,5	38,4	41,0
France	44,5	50,2	53,2	36,0	42,0	40,0	43,9	44,6
Germany	47,4	52,5	53,8	34,5	36,2	41,5	45,3	47,4
Greece	35,4	41,2	47,9	34,7	41,5	40,0	39,3	40,5
Hungary	42,9	51,0	56,5	24,9	39,8	39,3	41,1	47,6
Iceland	23,6	28,6	32,7	4,0	10,4	19,2	24,4	23,6
Ireland	16,3	23,1	34,2	-29,7	2,3	8,9	14,0	16,9
Italy	41,5	45,2	49,8	25,8	35,1	37,9	40,8	41,7
Japan	27,5	28,8	31,6	24,9	25,8	26,4	27,0	28,1
Korea	16,0	18,1	21,7	15,7	16,8	16,6	16,7	17,3
Luxembourg	30,6	36,5	43,5	7,0	13,0	17,6	22,8	29,0
Mexico	10,6	15,0	21,9	10,6	15,0	12,7	13,2	12,7
Netherlands	40,6	44,4	46,0	20,6	37,0	36,8	39,3	41,2
New Zealand	19,0	20,9	26,7	-13,8	2,6	11,2	17,2	20,0
Norway	34,3	37,3	42,9	19,2	29,9	31,1	32,9	35,0
Poland	42,5	43,7	44,8	40,3	42,2	42,5	43,2	42,5
Portugal	31,7	36,3	41,7	22,3	26,6	27,9	31,1	32,1
Slovak Rep.	35,6	38,5	40,5	22,3	23,7	29,4	32,0	36,1
Spain	35,9	39,1	42,6	30,2	33,6	35,4	36,3	36,4
Sweden	46,0	47,9	54,6	36,8	41,8	41,7	43,5	46,3
Switzerland	26,9	29,7	34,1	13,4	18,9	21,3	24,3	27,6
Turkey	42,0	42,8	44,7	42,0	42,8	42,4	42,5	42,4
UK	30,4	33,9	37,6	13,0	27,8	25,8	29,0	30,4
US	26,4	28,9	33,5	-1,7	11,7	19,3	22,3	26,4
OECD	33,7	37,5	42,0	18,3	27,5	29,8	32,5	34,5
EU-15	38,1	42,6	47,7	22,2	32,1	33,5	36,6	38,6
EU-19	38,5	42,9	47,6	23,2	32,3	34,1	37,0	39,3

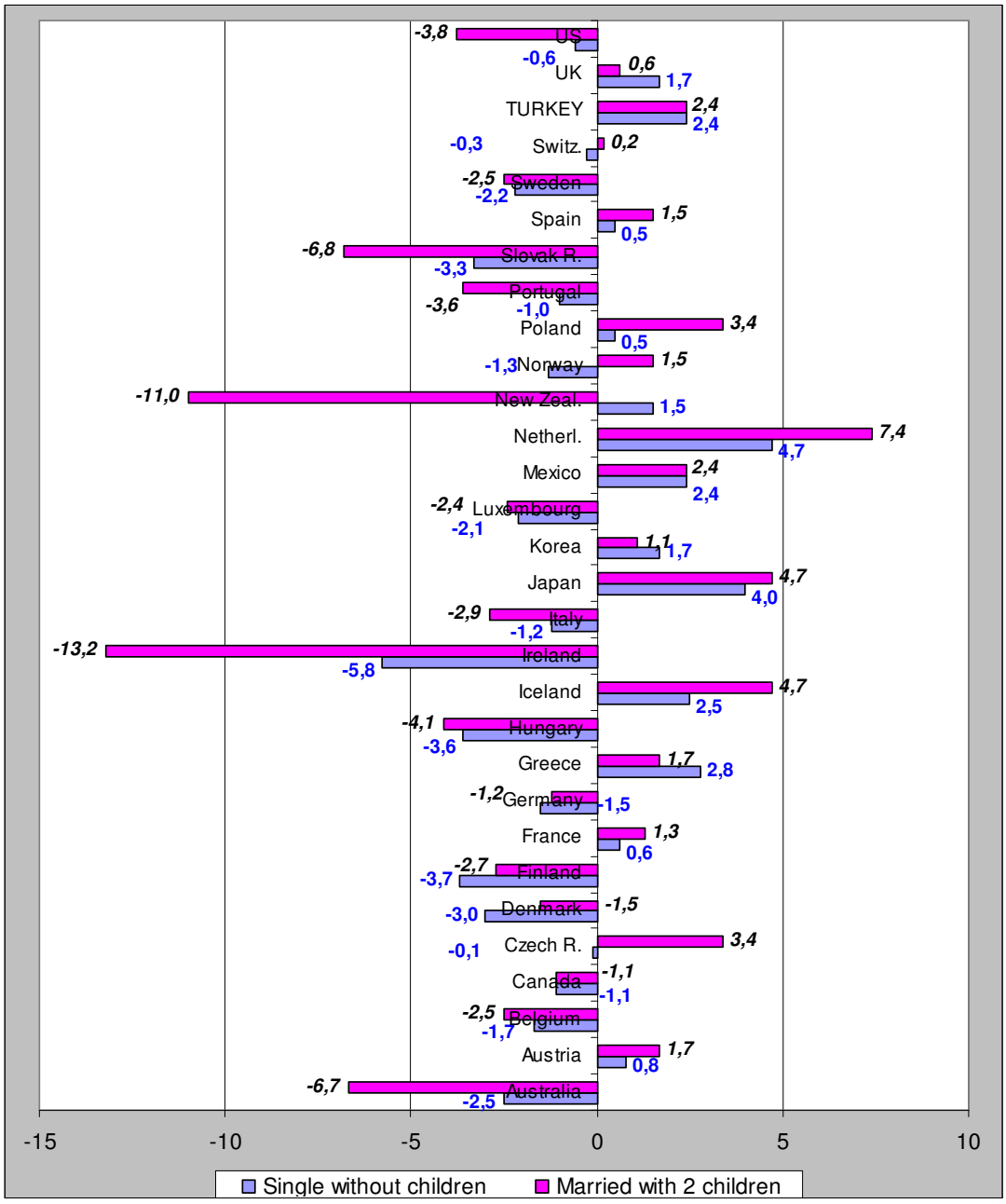
(a) excluding cash benefits
(b) Two-earner family

Source: OECD, 2007b.

Final point concerning comparison across countries is the evolution of the tax burden between 2000-2006. The countries experiencing the most significant reductions, exceeding 5 percentage points, were Australia, Ireland, New Zealand and Slovak Republic. The largest decline was observed in Ireland where single parents without children earning the average wage level benefited from a reduction in the wedge of 5.8 percentage points and one-earner family with two children benefited 13.2-percentage point reduction in the wedge. It is worthy of note that the tax wedge decreased for all family types in almost half of the OECD countries (i.e. Australia, Belgium, Canada, Denmark, Finland, Germany, Hungary, Italy, Luxembourg, Portugal, Slovak Republic, Sweden and US) from 2000 to 2006, while it increased across all family types in one third of the countries including Austria, France, Greece, Japan, Korea, Mexico, Poland, Spain and Turkey (Figure 12).

With regard to high level of labor taxes in Turkey, the general proposal is reducing tax rates to boost employment generation. Reducing taxes on labor may induce employers to hire more workers as far as it reduces labor cost; namely, if labor demand is sensitive to labor costs. To assess the responsiveness of the employment to the reduction of labor cost, elasticities of labor demand to payroll taxes should be examined. There needs a detailed firm level analysis in the industry and services sectors. In relation, TIBA (2004) makes an estimation regarding manufacturing sector covering establishments employing 10 or more workers for the 1994-2001 period. The annual dataset provides information on gross wages and employers' contributions (i.e. SSI premiums, unemployment insurance and housing fund payments, etc.). Labor taxes are those only covering employers' contributions. Employees' contributions, however, are captured by gross wages according to this decomposition mentioned before. Another significant issue to emhasize is that the dataset includes severance pay in contrast to the data the explanations above are based on. Covering severance payments in the analysis increases the sensitivity of one unit change in labor taxes to employment creation during recessions when extremely high number of layoffs are experienced.

Figure 12. The Cumulative Percentage Change in Tax Wedge in OECD Countries, 2000-2006



Source: OECD, 2007a.

With caution in interpreting the results due to the shortcomings in data, it is worthy of note that according to the calculations of TIBA (2004), the short term coefficient of gross wage is negative whereas the long term coefficient is positive and the (gross) wage elasticity of employment is 5.8 in the long run. This is an indication of the fact that a decrease in wages does not have the impact of increasing employment

in the long run. The coefficient of employment tax is negative for both the short and the long run, and the elasticity is 18.9 in the long run. The impact of employment tax cuts on employment will be positive both in the short and the long run. Therefore, it can be stated that employment taxes have a more significant impact on creating employment, compared to changes in wages (TIBA, 2004). Total wage elasticity of labor demand is estimated to be 0.2 for manufacturing industry. That is, 10-points reduction in employers' nonwage payments will result in 2-points increase in employment in long run. If coverage of the estimation was extended to services sector, the elasticity would be higher than 0.2 due to the higher labor intensity in this sector. Considering relatively unregulated structure of the services sector, reducing taxes on labor should have relatively more effects on employment creation rather than the calculated figure. That is, the actual elasticity of labor demand indicates that employment is considerably responsive to changes in labor taxes in Turkey. Recall that this analysis only covers employers' social security contributions because of unavailable data. A similar analysis needs to be conducted for employees' contributions and income tax since the results may change with extending the coverage of the calculation.

The result is consistent with the results of OECD's survey that high tax wedges are found to be associated with lower employment prospects for all groups in the OECD countries (OECD, 2006b). As to labor demand elasticities in Latin American countries based on analysis of panel data at the individual level, the range was between 0.06-0.48. On the other hand, according to cross-country regressions on macro data, the elasticities in OECD and EU-8 countries, ranging between 0.11-0.55 and 0.5-0.8 respectively, indicates a larger negative impact of the tax wedge on employment (World Bank, 2006). Because those estimations rely on different datasets and calculation methods, they do not provide sound basis for a comparison among countries as well as with Turkey.

The impact of reducing labor taxes on formal employment depends on the incidence of the tax (who actually pays the tax) in addition to the elasticity of labor demand:

> "The higher the elasticity of labor demand and the less that employers shift the tax onto workers, the greater the expected impact of lower payroll taxes on formal sector employment. ... If employers are required to make a contribution

> for workers' social security, but are able to reduce wages below what they would otherwise be, then workers are actually paying the tax, even when it is levied on employers. To the extent that taxes are shifted onto workers, the employment effect of lowering taxes might be relatively small. The intuition is straightforward: if the taxes are really being paid by workers through lower wages, then lowering taxes will raise wages rather than increase employment." (World Bank, 2006: 23).

Note that employment effect of reducing taxes is weakened by "pass through" into higher wages (Betcherman and Pages, 2007). To this, critical issue to be focused on is how the reduced taxes are shared by employers through lower labor costs and employees through higher wages. The larger pass through effect is the lower reduction in labor costs to employer when taxes are reduced, and the less job creation (OECD, 2006b; World Bank, 2006).[45].

To sum up, overall labor cost flexibility in Turkey has mainly resulted from wage adjustments, but not from nonwage costs. Nonwage costs constitute a remarkable weight on the labor market. The tax wedge in Turkey is relatively high among countries, it even ranks first for the families with children and for those earning at the low level. In addition, decreasing trend in net wage and uptrend in deduction rate from labor cost indicate increasing tax burden on labor. Although there needs more formal analysis to deduce an exact result about how sensitive labor demand to changes in labor taxes, on the basis of available survey on Turkey and empirical studies related to this issue, it may be suggested that high taxes on labor constitute one element of labor market rigidity. The relatively high tax burden on employment also justifies the concerns about restricting effect of the taxes on employment creation of the formal market and hence encouraging informalization. Besides, it is interesting to pay attention to the fact that despite such a high tax levy on employers

[45] Note that this thesis does not intend to estimate the overall impact of reducing payroll taxes on formal employment or to answer who actually pays the taxes Rather the related concern of this study is to understand whether labor taxes are at such a high level refraining employers from hiring more employees, and to some extent to answer whether labor demand is responsive to changes in labor taxes to suggest a policy implication. In addition to estimating labor demand elasticity, pass through effect needs to be calculated in order to answer how sensitive labor demand to nonwage cost, and to what extent cut of in labor taxes results in labor cost reduction; and in turn, employment creation. In addition, it is crucial to know how the informal sector responds to the changes in labor taxes in the formal sector in order to understand whether employment gains are through new job creations or due to the formalization of informal employment. Being aware of the need for such a comprehensive study analyzing the forementioned issues, the main concern of this thesis is not to estimate how many unit change occurs in employment in response to one unit reduction in payroll taxes, but to draw a picture of Turkish labor market revealing its (in)flexiblity, and accordingly to answer whether rigidites (related to nonwage cost as well) are the main responsible for low employment performance.

and employees, social security institutions still face a deep financial deficit. This result should be interpreted within the context of large extent of informal sector including unrecorded employment. The summary remark to underline is nonwage cost in Turkey seems to constitute rigidity in the Turkish labor market, and impediment for employment generation.

3.3.3. Unemployment Flexibility

Unemployment flexibility is the second component of labor cost flexibility. It is possible to define unemployment flexibility as responsiveness of the indicators of minimum wage and unemployment benefits to the changes in economic conditions. High level of minimum wage or unemployment insurance benefits is regarded as a signal of rigidity because they increase labor cost, and thus discourage employment creation.

In this section, after a brief definition of minimum wage, debates in the literature concerning the link between minimum wage and employment creation are stated. Then, in order to understand whether minimum wage is an obstructive factor for employment creation in Turkey, the long-run path of minimum wage is observed in comparison with OECD countries. Similarly, to understand whether unemployment insurance constitutes rigidity in Turkey, the impact of unemployment insurance benefits on exit from unemployment is examined in terms of the duration and the level of benefits. Lastly, the statutory basis of unemployment insurance system in Turkey is explained and eligibility requirements are introduced in comparison to the OECD countries.

3.3.3.1. Minimum Wage

Minimum wage can be defined as the lowest statutory level that employers have to pay. It provides a reasonable standard of living for the poorest workers. Bulutay (1998: XXI) considers the main role of the minimum wage in Turkey as an

instrument "to raise lower earnings to a socially acceptable level and to reduce in-work poverty. It also reduces family poverty because those who benefit from the minimum wage are usually from poor people". On the ther hand, for the opponents, minimum wage has adverse impacts on employment among low-wage workers rather than affording their basic necessities. It is also regarded as an impediment to downward wage flexibility and accordingly to employment creation. Therefore, the growth rate of minimum wages should be slowed down to stimulate labor demand for the low-skilled[46] (OECD, 2004).

There is no certain consensus from the empirical studies; the overall effect of minimum wage on employment remains ambiguous. Mainstream view claims that high minimum wages keep employers from hiring additional (low-skilled) labor. In line with this view, World Bank (2006) argues that higher minimum wage relative to the average wage can reduce employment rate in the formal sector, particularly of low wage workers. On the contrary, Kucera (1998) cites several emprical studies finding no robust evidence of a negative correlation between minimum wages and employment. Futhermore, any adverse effect of minimum wage seems to be so modest and outweighted by the social benefit derived from higher wages. Similarly, OECD (1998)[47] tests the effect of the minimum wage legislation on employment and finds little impact.

The level of minimum wage in Turkey and in its comparators is needed to be known in order to assess the arguments above. Initially, note the statutory basis of related regulations. Minimum wage legislation in Turkey dates back to 1967 and has been implemented nationwide since 1974. According to Article 39 of the Labor Law, minimum wages have to be adjusted at the latest every two years by the Ministry of

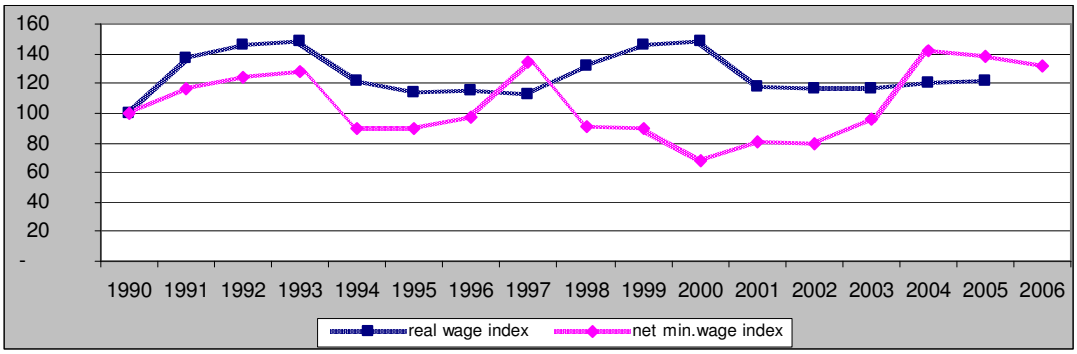
[46] This argument adresses the low skilled because the amount of pay to the workers increases in parallel with their qualifications (see Table 10).

[47] The relationship between minimum wage and employment is complicated considering the large extent of work places not obeying minimum wage requirements. That the adverse effect of high minimum wage is offset by non-compliance leaves little room for the argument pointing out the trade-off between minimum wages and employment.

Labor and Social Security through the Minimum Wage Fixing Board[48]. In line with the inflation rate, minimum wage started to be adjusted every year in the mid-1988 and twice a year since 1999.

Figure 13 depicts that real minimum wage index has presented large fluctuations over the years. The minimum wage index moved in parallel with real wage index between 1989-1993, when it substantially increased. This may be attributable to the reasons suggested while discussing real wage cycles during the same period (See section 3.3.1). A sharp decrease followed in 1994 due to the economic crises, and it showed a recovery after the crisis. Since 1997 minimum wage index has been moving almost irrespective of real wages. While real wages presented an upward trend, minimum wage declined between 1997-2001 which refers to the recovery years. In the following two years minimum wage index increased and it has been decreasing since then.

Figure 13. Private Sector Indexes of Real Wage and Minimum Wage (1990=100)



Source: MLSS, 2007; SPO, 2006.

[48] "The Minimum Wage Fixing Board, presided over by one of its members to be designated by the Ministry of Labor and Social Security, is composed of the General Director of Labor or his deputy, the General Director of Occupational Health and Safety or his deputy, the chairman of the Economic Statistics Institute of the State Institute for Statistics or his deputy, representative of the Under-Secretariat of Treasury, the head of the relevant department of the State Planning Organisation or his representative, five employees' representatives from different branches of activity selected by the highest – ranking labor organisation representing the majority of employees and five employers' representatives selected by the employer organisation representing the majority of employers. The Minimum Wage Fixing Board meets with at least ten members present. The Board takes its decisions by majority vote. In the event of a tie, the chairman has a casting vote" (Labor Law No.4857, Article 39).

World Bank (2006) compares the ratio of minimum wage to average wage in Turkey with the European comparators. In Turkey, the ratio in manufacturing sector increased from 33.9% in 1999 to 42.1% in 2004 and recently it is estimated to be around 43.6%. In the EU, the minimum wage as a percentage of average wages in industry and services ranged between 34% and 50% in 2004. Poland is positioned at the bottom end of the schedule with the lowest ratio of 33.9%. The Czech Republic, the UK, Hungary and Portugal rank in the same interval with Turkey of 38-47%. Ireland, the Netherlands and Malta ranging between 47-50% were at least three points higher than Turkey. That is to say, the level of minimum wages in Turkey is comparable with EU countries on a percentage basis[49].

The ratio of minimum wage to average wage has showed an upward trend during the sample period; however, the level of minimum wage is too low to survive which is below the poverty line, even below the hunger line. While monthly net minimum wage was 450 TRY, poverty line was 1.868 TRY and hunger line was 573 TRY as of 2006. According to data from Türk-İş Research Center (2007), minimum wage is sufficient to meet 20-day nutrition requirement of a four-person family. If ever basic necessities such as renting, clothing, transportation, health, education and cultural activities are included, minimum wage suffices only for 6 days. Tunalı (2003) similarly draws attention to the low level of minimum wages and states that the daily minimum wage over 2000-2001 was around 25% of the average daily wage in manufacturing.[50] Consequently, the magnitude of the effect of minimum wage on employment is not conclusive; but as regards average monthly wages in Turkey, it can be deduced that minimum wage in Turkey hardly provides a reasonable standard of living for the poor workers and is unlikely to serve its main function sufficiently. Such a low level of payment should not be regarded as an important obstacle to generate more areas of employment particularly for the low skilled.

[49] Indeed, a more accurate comparison needs to be made on the basis of purchasing power parity (PPP) in US Dollar terms. However, it could not be possible to calculate PPP given the difficulties with the availability of country data related to minimum wage.

[50] Even, minimum wage paid to workers aged below 16 was around 70% of the full wage in 1989 and increased to 85% in 2006. That means extensively use of child labor is a source of wage flexibility as well as unemployment flexibility (MLSS, 2007).

3.3.3.2. Unemployment Insurance Benefits

Unemployment insurance system is designed to provide the bare necessities of life for the unemployed. The main objective of the system is to compensate the loss of the individual who become unemployed involuntarily due to causes not stemming from her/himself. The aim of the scheme is not only limited to provide monetary compensation for the unemployed but also to reduce the cost of unemployment so as to create incentive for workers to engage in longer job searches (TEI, 2002). From the opposite perspective, unemployment insurance is deemed to make people reluctant to be hired. According to this view, if the level of unemployment benefits is too high, unemployed people become less willing to find a job, a situation called "unemployment trap". In order not to fall into this trap, the flexibility argument calls for incremental reduction of the amount of benefits (Gruber, 2004).

The relevant question is whether unemployment insurance benefit (UIB) is an instigator for high unemployment as it is argued for other passive labor market measures (i.e. severance payments). If so, it can be claimed that unemployment insurance system constitutes the rigid side of the labor market. Two components are relied on to measure unemployment flexibility; replacement rate and duration of benefits. The former indicator "replacement rate" indicating the level of UIBs is defined as the share of the average unemployment benefit to average wage. Putting it otherwise, replacement rate is the ratio of the net income available to unemployed individuals of working age population to the net income they would earn if they were working (Gruber, 2004). The second factor of the relationship between UIB and unemployment is "duration of benefits", which draws attention to the impact of the length of the benefit period on unemployment persistence. Unemployment flexibility is regarded low when the level of benefits gets higher or the duration of benefits gets longer.

The first issue to be held in this subsection is the related legislation and implementation of UI system with a particular stress on eligibility requirements. The UI scheme was introduced to Turkey on 25 August 1999 with the passage of Law

4447, the premium collections were begun on 1 June 2000, and the first payments were made in March 2002. Social Security Institution is the only responsible body for collecting the premiums and rest of the activities are carried out by TEI. The scheme covers workers who are registered to the SSI, but not civil servants or the self employed. UI system is funded by the contributions of worker (of 1%), employer (of 2%) and the government (of 1%).[51] The legislation sets UI replacement rate at the maximum of 50% of the average daily wage calculated on the basis of the net wages earned during the last four months before becoming unemployed. The upper bound of the benefits is the monthly net minimum wage for workers above 16 years of age. The duration of payments depends on the length of employment and accordingly the accumulated premiums. Workers who have held continuous employment for at least 120 days before becoming unemployed and for at least 600 days in the last 3 years are qualified to receive benefits. If this requirement is met before becoming unemployed, workers can receive benefits for 6, 8 or 10 months depending on accumulated premiums[52] (Tunalı, 2003; World Bank, 2006; Ercan and Tansel, 2006).

In additon to the numerical conditions concerning the number of days of continuous employment, actively seeking-work and involuntary seperation conditions are required. To measure the job search behaviour of the unemployed; namely, to decide whether the unemployed actively looking for work, job seekers have to register at an employment office. This requirement brings an unnecessary stringency which can be observed from the limited coverage of TEI which is the only national employment office in Turkey. Even, it is not perceived as the main agency for job search assistance. As of 2005, only around 500.000 job seekers applied to TEI for job-search, and of those 80.000 individuals were placed in a job (TEI, 2006). Considering 2.5 million unemployed, TEI does not seem effective enough in placement.

[51] Before 2002, the contribution rate was set at 7% with one-percentage plus for each contributor (3% paid by employers, 2% by workers and 2% by government).

[52]Workers who have paid premiums for 600 days in the previous 3 years receive benefits for 6 months; those who have paid premiums for 900 days in the previous 3 years receive benefits for 8 months and those who have paid premiums for 1080 days in the previous 3 years receive benefits for 10 months Tunalı, 2003:83; World Bank, 2006:90).

Another reason explaining why the UI coverage is at such a low rate is the requirement of involuntary seperation records. It is also the main requirement to receive severance pay. Many employers find several ways to evade this regulation with a view to minimize labor cost. As a result, majority of formal job seperations (around 50%) in the last 4 years are recorded as voluntary seperations. Of all those only around 15% were grouped into involuntary layoffs (World Bank, 2006). This means only 15% unemployed are eligible to receive severance payments as well as UIB (providing other conditions are met).

The requirements continue even after receiving benefits. If the unemployed who are paid UIB find a formal job with a SSI coverage, do not accept training offered by TEI or do not provide required documentation to TEI, they lose their entitlement. Such requirements enable a few unemployed to benefit from the scheme; as a result the UI fund in Turkey has accumulated a large amount of surplus equivalent of 15 billion YTL (over $11 billion) by June 2005 (World Bank, 2006).

The requirements are relatively strict compared with many developing countries in the OECD. The number of days of required minimum employment record is 600 days (20 months) in Turkey, whereas it varies between 3 and 12 months in the transition countries. Likewise in many OECD countries, unlike Turkey, the unemployed do not loose their entitlement providing that they do not actively seek work or they are not available for job (World Bank, 2006).

The stringency of eligibility requirements confines the implementation area of UI scheme to a great extent. While around 5 million workers had social security coverage through SSI by 2006, slightly over 100 thousand, accounting for 4% of total unemployed received UIB. In contrast, the coverage in OECD countries ranged between 25% and 75% as a percentage of total unemployed (World Bank, 2006). It is commonly thought that those requirements should be eased to make UI more widely accessible.

Table 17. Criterions to Benefit from Unemployment Insurance in Comparison with New Member States of EU

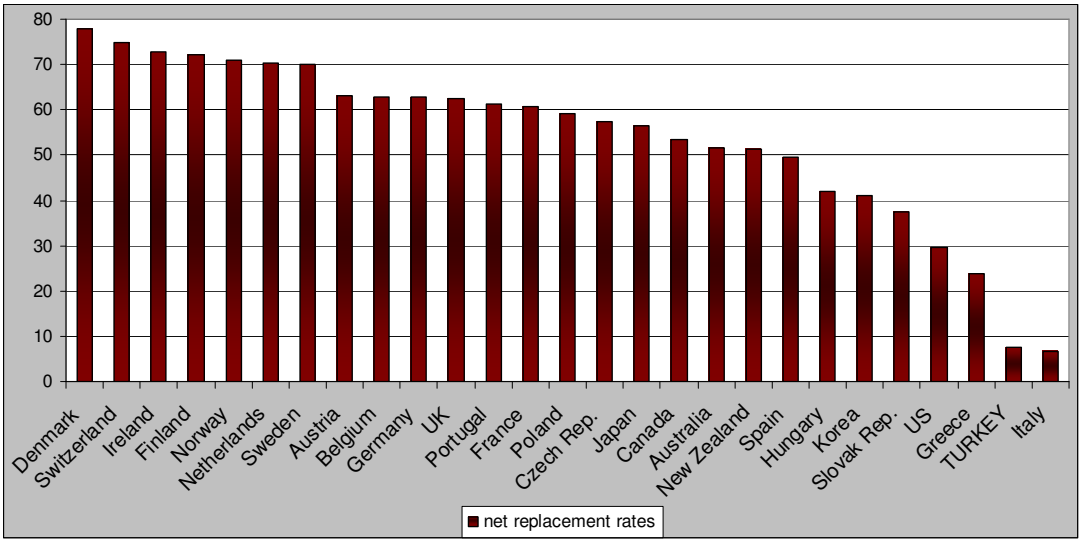
	Date	Reference Period	Required minimum employment record	Maximum duration of benefits	Relation to individual's gross earnings	Unemployment benefit levels[a]	
						Minimum	Maximum
Turkey	**1999**	**3 years**	**20 months (and 4 months in last year)**	**6-10 months**	**50%**		**100% (of youth)**
Bulgaria	1998	1 year	9 months	1 year	60%[b]	85%	140%
Czech Rep.	1998	3 years[b]	1 year	0,5 year	50% first 6 months, 40% following 6 months(60% in case of retraining course)	none (but 70% of MLS if not employed before)	150-180% of MLS
Estonia	2001 (effective 2003)	2 years	1 year	1 year	50% first 100 days, of the receipt 40% thereafter	40% of the average wage	150% of the average wage
Hungary	1997	4 years	3 months	1 year	65%[b]	90% of minimum old-age pension	180% of minimum old-age pension
Latvia	1993			0,5 year	90% of minimum wage (70% for new entrants)	70% of minimum wage	140% of minimum wage
Lithuania	1993			0,5 year	70%, later reduced to 60% and 50%		
Poland	1997	1,5 years	1 year	1,5 year	Flat rate amount paid at 378,2 cz	none	none
Romania	1998	1 year	1 year	9 months[c]	50-60% for 9 months	76-92%	210%
Slovakia	1997	3 years	1 year	1 year	60% first 3 months, 50% following 9 months	none	150%
Slovenia	1998	1,5 years	9-12 months	2 years	70% first 3 months, 60% following 3 months[c]	100%	300%

* Calculations are based on the equivalence: 1 month=30 days.
(a) As of % of minimum wage
(b) Not required if enrolled in a training course.
(c) Recipients can receive a supplement for each family member to raise the average income per family member to 80% of the gross minimum wage.

Source: World Bank, 2006.

Looking at net replacement rates in the OECD countries, we see that there is a large variation across countries. The Nordic countries are the most generous, with levels above 70%. Greece, Italy and Turkey and US, where UIB for the long-term unemployed (over 60 months of unemployment) are not operated or too low, rank among low-ratio countries below 30% (See figure 14). On the other hand, Canada, Czech Republic and Japan fall in the same range of OECD average of around 55%. Unemployment rates do not present consistency with the generosity of the index. In Denmark, Switzerland, Ireland, Finland, Norway, Netherlands and Sweden which rank among high-ratio countries, unemployment rates flactuating around 5% are substantially below the average. On the other hand, the range of unemployment in low-ratio countries rates varies in a wide-scale. While unemployment rate in US is 4.7%, the rate in Turkey was 10.1% as of 2006 (Table 7).

Figure 14. The Generosity Index of UIB (OECD synthetic measure of net replacement rates)



Source: OECD, 2007b.

Table 18. Net Replacement Rates and UIB Duration in 26 OECD Countries, 2004[53]

	Initial net replacement rate[a] (percentage of net earnings in work)	UIB duration[b,c] (months, equivalent initial rate)	Average of net replacement rates over 60 months of unemployment[d] (percentage of net earnings in work)
Australia	45	0	46
Austria	63	9	57(-2)
Belgium	61	No limit	61
Canada	63	9	48
Czech Rep.	56	5	53(-5)
Denmark	70	48	70
Finland	70	23	65(-9)
France	75	23	57(+4)
Germany	69	12	66(-3)
Greece	55	12	35
Hungary	49	9	39
Ireland	49	15	64
Italy	54	6	22(+2)
Japan	54	8	8
Korea	47	7	42
Netherlands	74	24	66
New Zealand	56	0	54
Norway	68	36	58
Poland	59	12	54
Portugal	83	24	68
Slovak Rep.	56	8	40
Spain	67	21	49
Sweden	75	28	63
Switzerland	77	24	69
UK	54	6	53(-1)
US	54	6	36(-6)

Source: OECD, 2007b.

Gruber (2004) analyzing EU countries emphasizes that current levels of benefits are not a specific obstacle to create more employment, whereas substantially high levels of UIB may be a disincentive for the unemployed to seek a job. The recent empirical studies under his consideration, however, do not reveal a positive correlation between UIB and unemployment but an inelasticity of unemployment to changes in UIB (See Huber et al., 2002; Schuettpelz, 2003). On the contrary, Layard, Nickell and Jackman (1996) reveal that higher levels of benefits create higher unemployment with an average of one half of elasticity of exit rate from unemployment in OECD

[53] See Appendix B.

countries. Their assertion is based on the assumption that high level of benefits reduces the fear of unemployment and effectiveness of the unemployed to search for jobs, accordingly exit rates decrease especially for the long-term unemployed.

Despite the variation in the results of empirical researches about the impact of the level of UIB on unemployment rate, it is generally accepted that the longer the duration of benefits the more persistent unemployment is (Gruber, 2004; Kucera, 1998; Layard, Nickell and Jackman, 1996[54]). Kucera (1998) analyzing the impact of UIB on unemployment in European countries, does not reach a firm conclusion on the adverse effects of the benefits on unemployment, and the results of empirical studies he surveys diverged a great deal from each other. However, he points out a significant relationship between the duration of UIB and unemployment persistency. According to the data from OECD, the duration of benefits ranges from 5 months in Czech Republic to 48 months in Denmark. While Italy, Japan, Korea, Slovak Republic, UK and US rank among cuntries with the shortest duration of benefits below 9 months; Netherlands, Norway, Denmark, Portugal, Sweden and Switzerland rank among the longest duration of at least 2 years (Table 18). Unemployment rates in the former group fluctuate in a wide-range from 4.7% in US to 13.3% in Slovak Republic as of 2006, whereas the latter group ranks among the low-ratio unemployment rates.

The persistency of unemployment may be observed from the incidence of long-term unemployment. Regarding long-term unemployment rate with the duration of 1 year and over, it accounts for 25.9% of total unemployment in Denmark where the length of UIB is the highest. As for the incidence of long-term unemployment in other countries, the rate fluctuates from 9.5% in Norway to 48.6% in Portugal. The incidence is 52.2% in Italy, 39.6% in Turkey and 53.7% in Greece which are the shortest-duration countries. These findings do not justify the empirical studies suggesting a significant correlation between the length of UIB and unemployment

[54] The solution they propose is not the elimination of benefits since wages will be more unequal in the absence of unemployment insurance. Instead, an alternative way to elimiate negative effects of long-term benefits suggested is that benefits should be replaced with active labor market policies as is the case of the Swedish model. By this way, more flexibility would be complemented through active help in job finding.

persistency. That is to say, unemployment insurance is only one of many factors which make people decide whether or not to remain idle (OECD, 2007b).

Consequently, empirical studies do not have consensus on the assertion about the negative impact of UIBs on unemployment, but there is a consensus on the link from duration of benefits to unemployment persistency, although this thesis does not evaluate the data from OECD countries in support of the empirical results. As regards the case of Turkey, UI system can not be an impediment to employment creation in Turkey because the level of benefits is not too high to generate disincentive for the unemployed to look for a job. The duration of benefits is also not high (maximum 10 months) compared with some European countries in which this period extends to 4 years, and eligibility requirements are extremely strict which confines the coverage of UI scheme to a great extent. In addition, the scheme is rather new and has not actively been working yet, hence Turkey should be evaluated as a seperate case.

3.3.4. Union Flexibility

Union membership provides favourable working conditions, including more protected and higher-paid jobs at the expense of leaving the non-unionized out[55]. The distinction between unionized and non-unionized creates segmentation in the labor market[56]. Since unionization brings a more regulated labor market and usually determines wages above the market-clearing level, it is deemed as a rigidity factor discouraging employment creation. Union flexibility explains to what extent trade unions are responsible for low employment performance and high unemployment rate. It is measured on the basis of two main indicators: "union density" and "union coverage". The former indicator is defined as the share of unionized workers in total

[55] This is explained by the insider-outsider theory, which analyzes the behavior of economic agents in markets where some participants have more privileged positions than others. "Incumbent workers (insiders) in the labor market enjoy more favorable employment opportunities than others (outsiders), on account of labor turnover costs (e.g. costs associated with hiring, training, firing, and insiders' ability to punish underbidding outsiders)" (Lindbeck and Snower, 2000:1).

[56] That is also related with wage flexibility as discussed previously.

employment, and the latter refers to the coverage of collective agreements. Union flexibility is assumed to be low when union density and union coverage are high. In many studies there is no difference between union density and union coverage; both are referred with the term "unionization rate". However, in this thesis union density refers to unionization rate, while union coverage reflects the number of covered workers by collective bargaining agreements.

First topic to be discussed in this section is the transformation in trade union movement in Turkey. Secondly, collective bargaining agreements are discussed by the help of trends in union coverage. Finally, an end result about the relationship between union flexibility and unemployment rate is tried to be inferred for the Turkish context. Note that the main concern of this subsection is not to analyze either union bargaining behaviour or union-nonunion wage differentials, but union coverage and density over the years to understand the relationship between un/employment and trade unions as a flexibility indicator.

3.3.4.1. Transformation in Trade Union Movement in Turkey after 1980

In Turkey, workers have had the right to establish trade unions since 1946, but depending on the political atmosphere, the right to strike was prohibited in some periods. In the period 1963-80 when import subsitution policies were implemented, the workers had the right to strike which they had lost in 1946. This period is called 'golden age of workers' in terms of wages and political rights including the rights to establish trade unions, to bargain collectively and to strike, except for the 1971-73 period refering to the years of military intervention when wages were stagnant or declining (Koç, 1997).

With the military coup of 12 September 1980, trade union movement experienced a turning point. The activities of three main trade unions (out of four) were banned, and the activities of the other were severely restricted. The ban on union activities was officially lifted in 1984; however, severe restrictions of the legislation of the military period made it impossible for trade unions to exercise the rights actively. The 1982 Constitution and the related legislation; the Labor Law No.1475, the Law

No. 2821 concerning Trade Unions and the Law No. 2822 concerning Collective Agreements, Strikes and Lock-Outs constitute the legal basis of anti-labor policies. During this period, the right to strike was limited only to the collective bargaining negotiations and trade unions were excluded from the political arena (Koç, 1997; Şenses, 1994).

With Law No. 2821, establishment of workplace, regional or occupational unions, federations of unions in the same branch of industry and councils of unions in a specific region were forbidden. The field of trade unions' activities was confined to a specific branch of industry at national level. This restriction limited the branches of industry to 28 economic activities/sectors. Moreover, application for trade union membership can only be accepted after a registration to a public notary. Then trade unions have to submit the membership form to the Ministry of Labor and Social Security (Koç, 1997). In addition, the conditions concerning authorization of bargaining agents are set under Law No. 2822. According to the Law, a trade union is able to engage in collective bargaining if it represents at least 10% of the total employment in the related establishment and at least 50% of the workers in the workplace (World Bank, 2006; Tunalı, 2003). This requirement eliminates wage bargaining at enterprise level; namely a centralized organization is obliged to engage in collective bargaining. As a result, most of one hundred employee unions in the private sector and over fifty in the public sector function under one of three main labor union confederations: TÜRK-İŞ (the Confederation of Turkish Trade Unions), DİSK (the Confederation of Revolutionary Trade Unions) and HAKİŞ (the Confederation of the Workers' Rights Trade Uninons). Likewise, twenty employer unions are affiliated with one confederation; Turkey Confederation of Employers' Association (Tunalı, 2003:78). As to the same Law, civil servants are left out of collective bargaining. The conditions imposed by both Acts create implicit restrictions for being a trade union member and becoming a bargaining agent.

Apart from restrictive measures on trade unions, given their lack of ability to adopt, changing structure of the production system towards new technologies has naturally limited their activities. The transformation in the economic structure has led to flexible production and management techniques. As a result of this process,

industrial relations have experienced substantial changes. The employed have shifted from industry to services sector, unskilled labor have been replaced by high-skilled labor, and accordingly the number of white collars has increased at the expense of a decrease in blue-collars (Kocabaş, 2004). In addition, industrial relations have adversely been affected by privatization process since the early 1990s, and the number of unionized workers have shrunk sharply during the process. The reason of the destructive impact of privatization on unionization is related with the composition of union membership. In Turkey, public sector plays a dominant role in union membership. Unionization rate in public sector (where about 1 million employees were hired) was about 90% in the early 1990s, whereas the rate fluctuated around 25% in private sector (Akkaya, 2003; Mahiroğulları, 1998). Given such an important role of public sector in unionism, union density has decreased to a great deal as a result of privatization. A significant number of public sector employees were laid off or obliged to retire. The laid-off workers, even if they were employed by another firm, forfeited their previous union rights. Unionization rate in the privatized establishments on average decreased from 90% to 36% in the late 1990s (Mahiroğulları, 1998). Moreover, as a result of such transformations in the economy over the last two decades, the number of workers covered by collective bargaining agreements has dropped by about 40% (Şafak, 2006).

The other complementary characteristic of the new economic structure is increasing share of services which keeps the proportion of manufacturing employment relatively moderate. This concomitant factor has adverse effects on unionization rate because the majority of trade unions' members are mostly composed of manufacturing workers, especially blue-collar workers (Kocabaş, 2004). To illustrate, the share of manufacturing in total employment was about 20% in the early 1980s and it was still around the same rate as of 2006. Whereas the share of services went from 28% to almost 50% over the years[57] (Figure 4). To sum up, low

[57] While the statistical data of 2005 belongs to the TURKSTAT, that of 1980s belongs to the OECD because data before 1988 could not be reached from the national data source. As the aim is to set out the sectoral change in employment since 1980s, the probable difference between data sources are ignored (see Figure 4). Comparing the 1988 and 2005 figures from TURKSTAT, the end point does not change despite a slight increase in the share of manufacturing employment from 15.8% in 1988 to 19.4% in 2005. Whereas the share of services sector in total employment increased from 37.7% to 51.1% during the same period.

level of unionization rate in Turkey is partly because of the impediments on unionization after 1980 and partly due to the stagnant share of manufacturing employment associating with increasing share of services sector.

Trade unions could not accomodate themselves to this technological and sectoral tranformation. Furthermore, trade unions in Turkey do not cover many fields concerning employees. They prefer to remain inactive in lue of insisting on workers' rights. The role of dominant ideology in ineffectiveness of trade unions can not be denied; however, there is something coming from internal. Services sector has been growing so fast, but the activities of trade unions do not cover the labor force in services sector. Turkey has been passing through a structural transition which should also be taken into trade unions' agenda. Moreover, informal sector with its large employment capacity should be embraced by union activities (Koç, 1997; Şenses, 1994). Unionization rate may not be a good indicator for Turkey given that the ratio only covers formal, especially manufacturing employment and excludes many types of employment status (particularly nonstandard employment) and large proportion of sectors other than manufacturing[58].

The adverse effects of the 1980s are obviously observed in the number of strikes and in the number of workers involved in strikes and collective bargaining agreements. 220 strikes took place in 1980 when 4.3 million workdays were lost due to strikes[59], and 33800 workers had gone on strike. In 1984, the number of strikes decreased to 4 and 561 workers was involved due to severe restrictions on the right to strike. The number of workers involved in collective bargaining agreements similarly dropped drastically from 746 thousand in 1979 to 340 thousand in 1984 (Şenses, 1994). The figures became comparable to the period before 1980s' only after 1989: the number of strikes went up 458 in 1990, the number of strikers was 166 thousand and the number of workdays lost in strikes was 3.5 million. The number of workers covered

[58] As other labor market statistics, statistics on unionization rate are also not reliable. Data obtained from different sources vary considerably, and the calculation methods of different sources are also not consistent with each other (see footnote 60 also).

[59] The amount of time not worked due to strikes is calculated by multiplying the number of workers involved with the number of work-days. In calculation, the work-days exclude national and public holidays and Sundays (as well as Saturdays in public sector).

by collective agreements reached its peak in 1991 by rising to 1.1 million. As illustrated in Section 3.3.1, the real wages also recovered substantially in the period 1989-1993, which was in line with resurgence of trade union movement. Trade unions regained their success in increasing the purchasing power of the wages through the street demonstrations called "spring actions" during the local elections in March 1989, when unionization rate (union density) exhibited an upward trend as well (Koç, 1997; Şenses, 1994).

With the 1994 crisis, a new austerity and stabilisation program was taken into agenda of policy makers. This program again turned the balance of power relations against labor. As stated during the discussion on wage trends in Turkey, real wages deteriorated to a great extent after the 1994 crisis, unlike employment and unemployment rates. The last crisis in 2001, however, carried the labor in a worse position in terms of employment figures as well (Figure 7). The indicators concerning industrial relations have also got worse during the period. As of 1995, 200 thousand workers went on 120 strikes, where 4.8 million work-days were lost. The figures went down 2, 26 and 166 thousand, respectively in 2006 (Table 19).

Unionization rate has presented a steady declining trend for the same period, and the crisis years are not exception. Union density varies depending on which data source is adopted. If MLSS data, which calculate unionization rate by using the ratio of number of unionized workers to recorded employment (under SSI) is relied on, unionization rate has exhibited a constant trend about 58% since 2001. If the number of wage and salary workers is taken as denominator in the ratio, unionization rate is found (around 25% during the said period) less than half of the rate of MLSS calculation. Furthermore, if the ratio to total employment is considered, the divergence gets wider as unionization rate fluctuates around 11%. The critical question is which method the calculation is based on. In this thesis, it is regarded more meaningful to rely on the number of wage and salary workers as the denominator rather than the other two[60].

[60] Tunalı (2003) and World Bank (2006) also rely on wage and salary workers in the calculation of unionization rate. However, the number of unionized workers they indicate is about half of the figures MLSS publishes. World Bank (2006) reports that 1.3 million workers, accounting for 12% of all wage and salary earners and around 5% of the total employment were unionized. However, according to the

Because labor unions adress wage and salary workers, other status of employment such as unpaid family workers, self employed or many types of irregular employment are left outside the coverage. As shown in Table 19, the growth rate in wage and salary workers is higher than that of unionized workers. As a result, unionization rate decreased from 30.3% in 1988 to 23.7% in 2006. At this point, it is crucial to underline the distinction between union membership and active (dues-paying) membership. The number of active union members is highly below the reported figures; the number of unionized workers was slightly more than twice the active membership (World Bank, 2006).

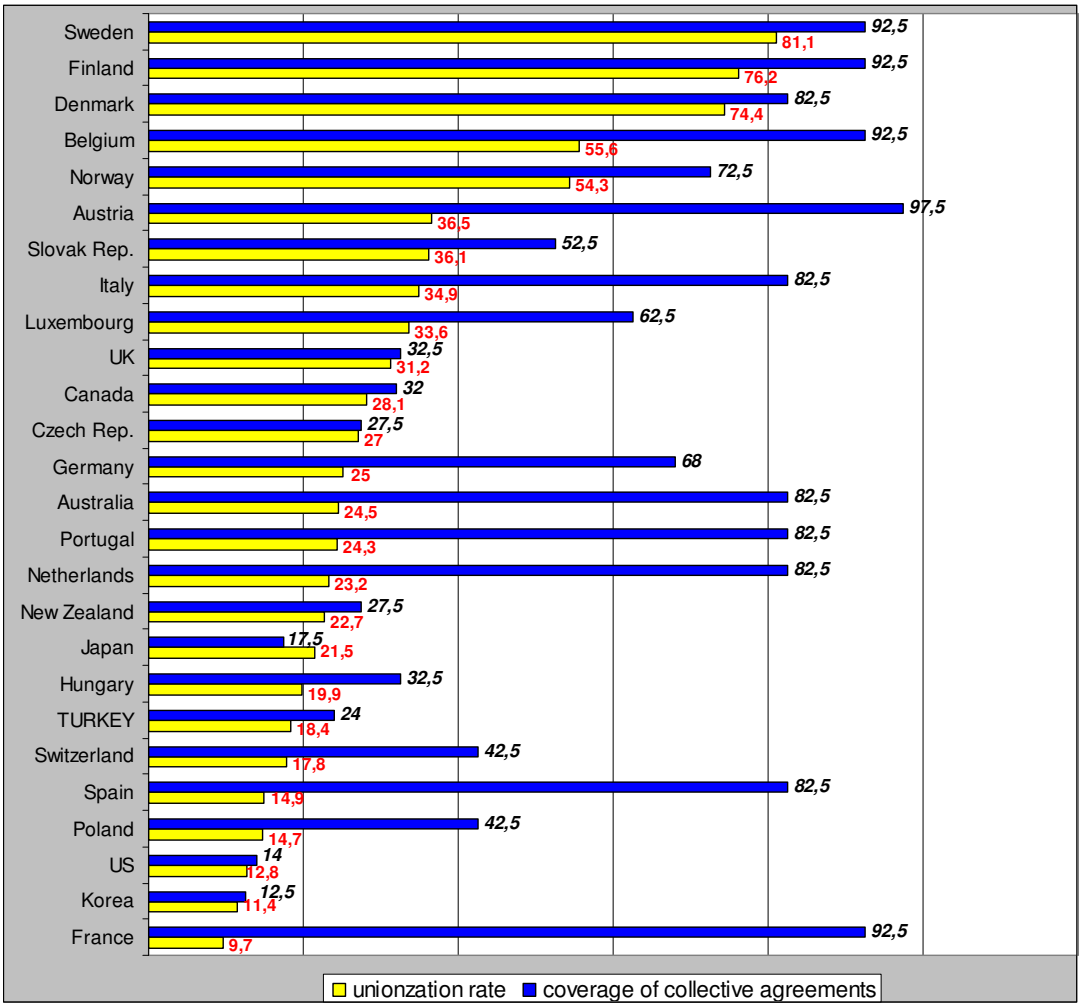
Table 19. Trends in Union Density: 1988-2006

	Number of Wage and Salary Workers* (thousand)	Number of unionized workers (thousand)	Unionization rate (%)	Number of Strikes	Number of Workers Involved in Strikes	Days Lost in Strikes (thousand)
1988	7.170	2.174	30,3	156	30.057	1.893
1989	7.014	2.032	29,0	171	39.435	2.911
1990	7.290	1.998	27,4	458	166.306	3.467
1991	7.171	2.131	29,7	398	164.968	3.809
1992	7.584	2.254	29,7	98	62.189	1.154
1993	7.648	2.486	32,5	49	6.908	575
1994	7.631	2.644	34,6	36	4.782	243
1995	8.504	2.667	31,4	120	199.867	4.838
1996	8.554	2.709	31,7	38	5.461	274
1997	9.790	2.714	27,7	37	7.045	182
1998	9.972	2.856	28,6	44	11.482	283
1999	9.824	2.988	30,4	34	3.263	230
2000	10.488	2.777	26,5	52	18.705	368
2001	10.156	2.595	25,6	35	9.911	286
2002	10.625	2.665	25,1	27	4.618	44
2003	10.707	2.734	25,5	23	1.535	145
2004	11.079	2.830	25,5	30	3.557	93
2005	11.948	2.924	24,5	34	3.529	177
2006	12.617	2.994	23,7	26	2.061	166

Source: MLSS, 2007; * TURKSTAT 2007.

data from MLSS, the number of union members 3 million, accounting for 13.3% of total employment in 2005. If the Ministry data are taken into account, unionization rate (calculated on the basis of wage and salary workers) is found as 25.1% in 2002 and 24.5% in 2005. The difference between the data sources in terms of the number of unionized workers explains the deviation of unionization rate (figures depicted in Table 19 from the World Bank calculations). Related to this issue, Koç (1997) draws attention to the double-counting problem in the data from MLSS; yet MLSS statistics are adopted in this study since there is no other regular record of unionization figures and there is not enough evidence to prove the double-counting assertion.

Figure 15. Union Density and Union Coverage by OECD Countries, 2004



Source: compiled by TIBA, 2004 and OECD, 2004.

The international ranking of Turkey varies due to the differences among data sources. This reduces the robustness of comparison across countries. According to data from OECD, union density rates ranged from 81.1% in Sweden to 9.7% in France. Turkey with 18.4% union density[61] leaves Switzerland, Spain, Poland, US, Korea and France its behind. However, if its own calculations of the thesis are taken into consideration, Turkey's ranking, with a 23.7%, would rise to 12th rank from the bottom end. To sum up, unionization rate in Turkey has declined over time; even fell

[61] The ratio of 18.4% refers to the ratio of the sum of those paying membership subscription and those members of labor unions (representing below 10% of workers in the same branch of industry) not autorized to be a party of collective agreement to total employees under record of MLSS (e.g. those covered by SSI). For this reason, the ratio based on the own calculations of this thesis differs from the one used for international comparison.

behind many OECD countries. Although one needs caution in interpreting the results, the findings suggest that trade unions are unlikely to create rigidity in Turkey (Figure 15).

3.3.4.2. Collective Bargaining Structure

Wage bargaining may take place at different levels (e.g. the enterprise, industry, sector, national level) and between various negotiating partners (i.e. a single employee and the employer, work councils, trade unions, government) (Gruber, 2004). In Turkey, wage setting mechanism is based on collective agreements which are regulated under the Law No. 2821 make detailed provision for the inclusion and termination of the employment contract (MLSS, 2007). The parties of collective agreements in Turkey are labor unions and employer's union or an employer who is not a member of any association. Since there is not a standard classificiation of wage bargaining systems, the case of Turkey is evaluated relative to other country experiences. On one side of the spectrum, there are Scandinavian countries with centrally determined wages, and the US and Canada are on the other edge of the spectrum with no role for central authorities in wage determination. Countries such as Germany, Belgium and Netherlands have institutional structures that oscillate between centralized and decentralized procedures (regarding wage determination) (TIBA, 2004).

Neoclassical theory considers collective bargaining institutions as leading to rigidities which adversely affect labor market performance. Some studies relate a favorable employment performance of the US to her decentralized wage-setting structure bringing about real wage flexibility (OECD, 1994). However, country experiences are not consistent with this argument. Coverage of collective bargaining agreements[62] is one of the main criteria indicating the level of centralization in wage

[62] One needs a warning about the difference of the coverage of collective agreements and trade unions: the latter encompasses the former in Turkey; that is all of the unionized workers are not covered by collective agreements (even only 40% of union members were covered by collective agreements). On the contrary, the general rule is the reverse, despite considerable variation across countries. The coverage of collective bargaining agreements is generally higher than the coverage of trade unions. That is because of the countries' common practice of expanding the coverage of

setting. As to the coverage in Turkey (henceforth called union coverage), there are about 950.000 workers covered by a collective agreement, which account for 8% of total wage and salary earners as of 2005[63]. Table 20 reveals that there is a declining trend in the number of workers covered by collective agreements in contrast to uptrend in the number of wage and salary workers for the last two decades.

Table 20. Trends in Union Coverage: 1988-2005

	Number of Wage and Salary Workers* (thousand)	Number of Workers Covered by Collective Agreements** (thousand)	Union Coverage Rate (%)[a]
1988-1990	7.222	1.522	21,1
1991-1993	7.597	1.496	19,7
1994-1996	8.582	1.321	15,4
1997-1999	9.633	1.183	12,3
2000-2002	10.342	1.032	10,0
2003-2005	11.245	954	8,5

(a) The figures are calculated on the basis of three-year average.
Source: * TURKSTAT, 2007; ** MLSS, 2007.

Figure 15 compares Turkey with OECD countries; and shows that Turkey with a 24%[64] union coverage rate ranks the fourth lowest. Korea, Japan and the US are the

collective bargaining agreements by including those not member of trade union. To illustrate, in Korea, Japan and US where such applications are not prevalent in general use the coverage rate is relatively low (TIBA, 2004). Finally, note that in the thesis union coverage refers to the number of workers covered by collective bargaining agreements, while union density refers to the unionization rate.

[63] The data used here is gathered from MLSS for the number of workers covered by collective agreements and from TURKSTAT for the number of wage and salary workers. Looking at the figures reported by the World Bank (2006), coverage is relatively lower though it belongs to the same year; only 700.000 workers majority of whom are in the public sector are covered by collective agreements. The considerable diference between data sources makes the reliability of a survey based on statistics disputable. Çelik (2004) makes a different calculation by dividing number of workers covered by collective agreements to total number of recorded workers predicated on MLSS data (but not wage and salary workers) in order to provide a more realistic rate as he says. Updating the figures on the basis of his calculation, while the number of covered workers by a collective agreement decreased from 1.3 million in 1985 to around 950 thousand in 2005, the number of recorded workers went from 2.8 million to 5.1 million. Thereby the coverage rate decreased from 46.4% to 18.6% during the period. However, the end result suggesting union coverage has a declining trend for more than two decades does not change whichever calculation method is prefered.

[64] The union coverage rate is calculated by dividing the number of workers covered by collective agreement to the number of workers under record of MLSS (e.g. those covered by SSI). This thesis uses wage and salary workers as the denominator; that is, the difference between the own calculation

preceding countries, *per contra* Austria, Belgium, Finland, France and Sweden are those with the highest rate (over than 90%). The low rate of coverage of collective bargaining indicates the weakness of trade unions.

Apart from union coverage rate, the level of centralization in wage determination may be measured on the basis of three other criteria; a) the levels at which the wage bargaining is set, b) the coordination between the levels at which wage bargaining is set and c) the mechanisms to expand the coverage of agreements for those who are not parties to the wage bargaining process. In most EU countries, wage bargaining is conducted at the sectoral level. In other developed OECD countries such as US, Canada and Japan, except Australia, wage bargaining is observed to be made at a smaller scale, i.e. at the firm level. This is also frequently the case in Turkey. As regards the second criterion, it can be stated that wage determination is more central than it seems, given the existence of some coordination mechanisms even at the smallest scale such as the firm level. These coordination mechanisms can either be open or hidden. In the EU countries except UK, some type of coordination is observed, whereas there are no coordination mechanisms in US, Canada, Switzerland or Turkey (TIBA, 2004). Finally, looking at the expanding mechanisms of the coverage of collective bargaining agreements, there is no application area of those mechanisms in the so-called low-decentralized countries (i.e. US, UK and Canada) either do the other corporative institutions. There are two ways in Turkey to cover those not members of the trade union which is one of the parties of the collective agreements but working in the same establishment branch; by paying solidarity subscription (dayanışma aidatı) or through Decision of the Council of Ministers upon request of the employer, employer's union or MLSS (TIBA, 2004).

Considering the criteria discussed above, wage bargaining system in Turkey can not be designated as comprehensively centralized like Austria and Scandinavian countries where wages are determined centrally and all corporative structures work effectively, or decentralized as in the case of Canada, US and UK. Turkey ranks at intermediate level, having institutional structures that oscillate between centralized

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of this thesis (8.5%) and the ratio used for comparison (24%) is resulted from the difference in the denominators.

and decentralized procedures like many EU countries. But it is still true that Turkish government has a decisive role in wage-setting as a major employer in the public sector.

Unemployment rates in the countries categorized as high-centralized fluctuate around 5%; those in decentralized countries are also about the same rate, whereas the countries ranking in the middle vary in a wide range. To this, empirical results are consistent with the assertion that strongly centralized bargaining structures are more likely to increase wage flexibility as is the case of largely decentralised; namely those in the middle range are deemed to provide lower flexibility compared with the pole points (Gruber, 2004; Layard, Nickell and Jackman, 1996; Kucera, 1998). This argument results from the fact that a strong coordination between unions and employer organizations can inverse adverse effects of union coverage and union density on unemployment due to higher responsiveness of real wages to the market-clearing level in the face of demand shocks (Cazes, 2002; quoted in Gruber, 2004).

> "Both highly- and weakly-corporatist economies have performed well, since in systems of highly-centralized bargaining, it is argued, wages are determined through a calculated consideration of macroeconomic consequences; in systems of highly-decentralized bargaining, on the other hand, wages are argued to be determined by the unfettered workings of the labor market itself. In either case (but not the intermediate case), the end results in terms of unemployment are similar" (Kucera,1998:11).

Keeping in mind that unionization rate is not a good indicator for Turkey; there are some important conclusions to be infered from the findings: i) The power of trade unions is too weak in Turkey. ii) Labor unions in Turkey are not effective enough to meet the demands of the employees; even the scope of their activities is quite limited. iii) An overview of union movement over the years denotes that political attitude has played a determinent role in directing the movement. After 1980s the balance of power relations has changed against labor (except for some recovery years especially after 1989), and the economic crises have led the conditions for labor even worse. iv) In line with the political developments, union flexibility has increased as union density and union coverage goes down; however, indicators concerning employment or labor income have not changed for the better. v) Being cautious in assessing statistics given their inconsistency with each other, unionization rate is substantially low in Turkey relative to many OECD countries, especially Scandinavian countries

vi) Trade unions create insider-outsider effect as many employment types and important sectors are excluded from trade unions' activities such as non-standard emloyment, services sector, informal sector etc. vii) The balance of power relations has not turned in favor of workers yet. This can be observed from unionization figures in Turkey which have a declining trend since the last two decades. Therefore, trade unions do not seem to constitute rigidity in Turkey. viii) On the other hand, the wage setting mechanism in Turkey not to be counted as comprehensively centralized or decentralized ranks at the intermediate level. This provides lower flexibility in contrast to the pole points.

CHAPTER 4

PRODUCTION FUNCTION FLEXIBILITY

4.1. Introduction

The second component of labor market flexibility is called production function flexibility. In this thesis, numerical flexibility[65] is examined in terms of both its internal and external sides. Internal numerical flexibility (working time flexibility) includes four components; work-time flexibility, irregular hours, shift-work and work at weekends. External numerical flexibility (flexibility in employment) composes of part-time and temporary employment, dismissal and employment protection, home-working and alternative workers such as occasional and seasonal work (Monastiriotis, 2003). Of all the components, this thesis emphasizes those which are possible to quantify and/or those which are possible to study through the legislative framework.

Production function flexibility is concerned with institutional components of labor input rather than the cost side; such as regulations on employment types, hiring and firing, the size of workforce, the length of working time or work content (Monastiriotis, 2003). Many studies in the literature rely on different classifications in the discussions of production function flexibility. The most widely used classification is presented by Atkinson (1984), where he distinguishes flexibility indicators according to their location in the firm; inside or outside. He groups the indicators into three main types of flexibility; functional, numerical and financial[66].

[65] There is another component of production function flexibility, labeled as functional flexibility which is not discussed in the current study. This type of flexibility similarly stems from both internal and external sides. While internal functional flexibility refers to with-in job mobility, employee representation rights, labor standards and multi-tasking; external functional flexibility is the outcome of changes in the organisation of production (e.g. sub-contracting). Data limitation prevents the inclusion of functional side of production function flexibility into the research.

[66] Financial flexibility refers to the downward wage adjustment in the event of demand shortages. It is achieved by decentralization in wage determination so as to create wage differantiation between

Inspired by Atkinson, many studies have formulated their own classifications and characterized their own flexibility definitions. For instance, Chung (2006: 4) describes four types of flexibility: external numerical, internal numerical, functional (organizational) and financial flexibility. Apart from this multi-dimensional grouping, Kucera (1998: 4) talks about a dichotomic classification; flexibility in work versus flexibility in employment; functional versus numerical flexibility and external versus internal flexibility. This thesis adopts Monastiriotis (2003) approach in grouping as it is considered clearer to decompose seperate components of production function with the least interrelation and to capture all dimensions of production function flexibility.

According to Monastiriotis (2003:7), production function flexibility involves "flexibility in the labor input" and "flexibility in the work content". The former index, called "**numerical flexibility**" means the ability to control the number of working hours and the size of workforce; regulation of hiring and firing, and the use of atypical employment arrangements such as part time and temporary workers in line with the changes in labor demand (Bulutay, 1997: 26; Kucera, 1998: 4). The first component of numerical flexibility refers to the adjustment in employment called "external numerical flexibility" which involves the relations outside the firm. It is composed of part-time and temporary employment, dismissal and employment protection (hiring and firing cost), home-working and alternative workers (occasional and seasonal work). The "internal numerical flexibility" commonly known as working-time flexibility (consisting of irregular hours, overtime work, shift-work and work at weekends, etc.) refers to the adjustment of working hours of employees already employed within the firm (Chung, 2006: 4; Monastiriotis, 2003: 9).

The second index of production function flexibility is "**functional flexibility**" which involves flexibility in work content by easing the transfer of employees to different tasks and activities within the firm (Chung, 2006: 4). It is related with the production process;

> "….coupled with more flexible forms of work organisation, such as flexitime, group and team approaches, or more general job definitions, the new

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workers (Chung, 2006). This type of flexibility was discussed in the previous section (labor cost flexibility) under the title of 'wage flexibility'.

> technologies enable a firm to produce variations of products, even completely different products, cheaply in smaller batches. This makes it possible for firms to respond easily and quickly to ever rapidly changing markets" (Curry, 1993:100; quoted in Kucera 1998: 4)

Two components of functional flexibility come from internal and external sides as in the case of numerical flexibility. "Internal functional flexibility" is defined as "the ability of companies to improve their operating efficiency by reorganising the methods of production and labor content (multiskilling, decreases in job demarcations, increased employee involvement) in order to keep pace with changing (demand conditions or) technological needs" (Koshiro, 1992:14; quoted in Monastiriotis, 2003:6). The elements of internal functional flexibility can be summarized as with-in-job mobility, employee representation rights, labor standards and multi-tasking. "With-in-job mobility" which means the degree employees can be transferred to different tasks within the firm may be measured on the basis of the number of employees who changed occupation over the last year, yet remaining with the same employer, as a share of all the employees who changed occupation in the same period (Monastiriotis, 2003: 14). "Employee representation rights" refer to "the extent of workers' involvement in decision making" including the right to organise in a union, arrangements on holidays, sickness or maternity leave and working hours, while labor standards are related to general working conditions consisting of arrangements on working conditions, health and safety regulations (Monastiriotis, 2003: 13). The second element of functional flexibility "external functional flexibility" is the outcome of changes in the organisation of production (e.g. sub-contracting, outsourcing); namely, "the ability of firms to externalise or diversify parts of their production (vertical disintegration), mainly through sub-contracting" (Monastiriotis, 2003:7).

Many of the elements related to functional flexibility are unlikely to be quantified easily; so are some components of numerical flexibility. Therefore, it is diffucult to reach definite results most of the time. Although the importance of functional flexibility has been increasingly more emphasized in recent years, the scope of production function flexibility is limited to numerical flexibility in this thesis. Numerical flexibility is examined through internal and external components, respectively.

4.2. The Indicators of Production Function Flexibility

4.2.1. Internal Numerical Flexibility

The first type of numerical flexibility known as 'working-time flexibility' refers to the ability of firms to adjust their workforce less costly (Monastiriotis, 2003). This kind of flexibility is achieved by adjusting working hours of employees already employed by the firm. Internal numerical flexibility involves regulations on working hours and shift-work. The former refers to flexible working hours, also known as irregular hours, includes average of (i) the share of employees working variable hours, (ii) the share of average weekly overtime to average weekly standard hours, (iii) the share of unpaid to total overtime. The second regulation is shift-work which means the percentage of employees doing shifts including night and weekend shifts (calculated on the percentage of employees working during nights and weekends) (Monastiriotis, 2003).

Thanks to flexibilization of working time, firms can internally adjust their labor inputs and distribute them according to their needs in order to respond to demand changes quickly so as to maintain a stable production level. There are two important questions to be answered here: whether flexitime arrangements are covered by the Labor Law in Turkey, and to what extent the regulations on flexitime are in practice?

In order to answer the first question it is helpful to overview regulations on hours of work. For civil servants legal weekly working hour has been 40 hours since 1975, except for those in the health sector who have had a 45 hour work week. For other types of employees, maximum number of standard working hours has been 45 hours per week since 1983, before then it was 48 hours. The distribution of working hours in a day depends on the duration of work-week. If an establishment has a 6-day work week, maximum hours of work per day is 7.5 hours, and if the establishment operates 5 days per week, the maximum is 9 hours per day[67]. If employees have to work

[67] The Labor Law regulates hours of work in more detail in terms of different types of employment relations such as child labor, work during maternity or work in jobs and establishments where, due to their nature, the application of normal daily and weekly working times is not possible; e.g. heavy vehicle drivers etc. See Articles 71 to 76.

during weekends, they must have at least a-day of uninterrupted rest during the week (Togan and Özyıldırım, 1997; Tunalı, 2003). The legal upper limit of normal working hours per day is important because each hour worked over the daily maximum is named "overtime work" in the legislation. That is, employees performing over the normal working hours per day have to be paid 1.5 times more for every extra hour, furthermore over time rate in weekends and holidays are 3 times more than the normal rate. The law also puts upper limit on overtime work that can not exceed 3 hours per day and 90 days per year (Togan and Özyıldırım, 1997: 150).

Another kind of irregularity in terms of working hours is "night work" set by the Law that work day begins later than 8 p.m. and ends earlier than 6 a.m. Article 69 of the Law stipulates that night work for employees must not exceed 7.5 hours, and they are not permitted to be engaged in the night shift for more than a week. Also, there must be at least eleven rest-hours between two shifts. Employees engaged on night work also must be engaged on day work in the following week. Alternation of work on night and day shifts must be carried out on a two-week basis as well (Tunalı, 2003). According to the previous law, men under the age of 18 and women regardless of their age can not engage in night work in industries. However, the new Labor Law has removed the restriction on employment of women in night shifts of manufacturing establishments (World Bank, 2006). This points out a tendency towards flexibilization of working time on the legal basis.

Also, some important regulatory changes related to flexitime arragements were introduced with the new Law. According to Article 63 of the Law, the upper limit of normal weekly working time is 45 hours, while that of a workday is 11 hours a day. However, this limit can be relaxed depending on which reference period the arrangement is based on. "Regular work can be increased or decreased as long as the average time worked over two or four month is as stipulated". Deviation from regular working time is also possible if employee and employer agree on decreasing or increasing the working hours a day (Ercan and Tansel, 2006: 8; Labor Act No.4857, 2003: 119-121). In Turkey, this type of deviation from regular working hours is likely to be used because both parties are usually willing to accept flexitime arrangements. Employers already demand greater flexitime arrangements enabling

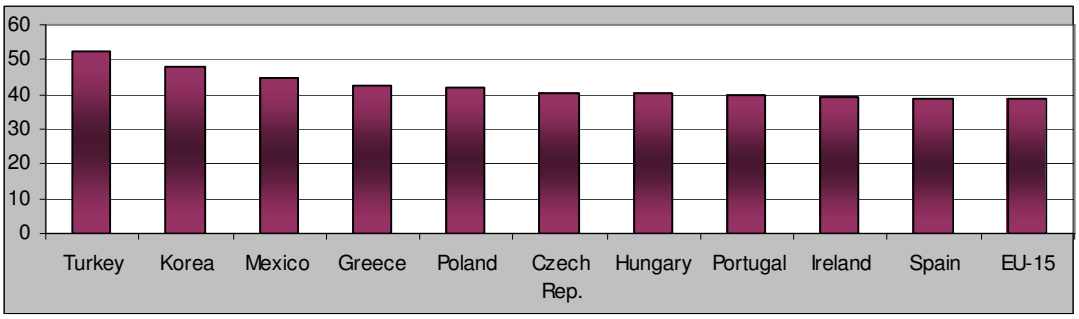
them to abolish overtime payments, so that they can reduce labor costs. From the side of employees, there is mostly obligatory willingness as the bargaining power of workers is generally low. There is a slight concensus between workers and employers such that workers can not insist on higher wages, better working conditions or working time arrangements in order to be kept on working.

There are two other types of flexitime arrangements recognized in the new Labor Law, as compensatory and short-time working. "Compensatory work" is regulated under Article 64 (Labor Act No.4857, 2003: 122). The Article stipulates that compensatory work shall not be considered overtime work, it rather refers to a kind of call upon work carried out within a two-month period in order to compensate unworked time loss due to compelling reasons, extension of national or public holidays and termination of job upon worker's request. Compensatory work can not be performed during rest days, and shall not exceed three hours per day and the maximum daily working hours in any case (Ercan and Tansel, 2006: 9). "Short-time working" is regulated under Article 65 (Labor Act No.4857, 2003: 123-127). The Article stipulates that working time can be shortened temporarily due to the compelling reasons emerging from general economic crises rather than the bottlenecks in the establishment or in the sector. The Employment Organization of Turkey and the Labor Union signatories of the collective agreement have to be immediately informed of short-time working arragement with its reasons by employers, and the MLSS decides the acceptability of the request. The duration of the arrangement is limited to three months. During this period, workers on short time can recieve their unemployment insurance benefits although they are considered as employed (Ercan and Tansel, 2006: 9).

Apart from the statutory basis, flexibility in working hours in Turkey is not confined to the legal-based arrangements as regards the proposals of "concentrated work week", "annualization of work", "flexible shifts" to arrange the length and the number of working days according to the employers' needs without any additional payments (Onaran, 2004: 6). Irregularity in working time is more widely performed in the informal sector without a legal basis. That is, implementation area of working time flexibility is not restricted with the legal texts; it is rather prevalent in practice.

Take a brief look at actual working hours in the last two decades in order to understand the tendency over the years. It is observed that firms have been relying more on longer working hours. Actual hours of work per week in manufacturing in urban areas were reported as 49.5 in 1988 and almost 54 in 2001 (Tunalı, 2003). Moreover it is emphasized that working hours in Turkey have been increasing, while working hours in European countries have been falling. Even usual working hours followed higher trend relative to actual working hours over the years. The differences are larger for women, especially large for rural employment. World Bank (2006) reports the 2004 figures concerning hours worked per week in manufacturing in comparison with OECD countries, Turkey ranks the first, leaving even Korea behind, which is notorious for having long working hours (Figure 16).

Figure 16. Hours Worked Per Week in Manufacturing, 2004



Source: World Bank, 2006

In sum, there is a tendency towards longer hours of work over the years, Turkey leaves behind even OECD countries with the longest work day. Despite the commonly use of irregular hours of work, Turkey has newly introduced flexible working time arrangements on a legal basis. The new Labor Law recognizes new types of flexitime arrangements; hence it is likely to have positive repercussions on internal numerical flexibility in the near future.

4.2.2. External Numerical Flexibility

The second group of numerical flexibility refers to removing regulations on job security, easing dismissal rules and extending use of atypical employment, which is assumed to create incentives for job creation in formal sector, increase labor force participation and encourage compliance with the law as it becomes less costly (Wallace, 2003). Contrary to internal numerical flexibility, this group represents the adjustability of the labor intake, or the number of workers from the external labor market instead of labor already employed by the firm (Monastiriotis, 2003).

Flexibility in the size of employment is primarily examined through employment protection legislation (EPL). Surveys concerning EPL are generally based on an index which mainly scores permanent (regular) and temporary (irregular/nonstandard) components of employment (World Bank, 2006). Permanent characterictic of employment protection is related with dismissal protection (severance payments) that is the third issue discussed under external numerical flexibility. In addition, flexible employment arrangements are examined within their legal framework and in terms of their shares in total employment.

4.2.2.1. Employment Protection Legislation

Employment Protection Legislation provides job security by restricting employers' freedom to hire irregular workers and/or to fire regular workers for economic reasons. In a wider concept, EPL regulates the initiation and termination of the employment relationship by setting hiring and firing rules. These regulations make labor more costly to the employer (World Bank, 2006). EPL is a commonly used index to measure labor market flexibility particularly to make comparisons between countries. OECD composes an EPL index on the basis of two basic elements; restrictions on dismissals of permanent workers (i.e. severance payments) and

restrictions on the use of temporary and fixed term employment arrangements (Taymaz and Özler, 2004)[68].

There are two opposite perspectives concerning employment protection regulations. According to the supporters of EPL, restrictions on non-permanent hiring and on employer dimissal rights are deemed to provide social protection for workers and strengthen bargaining power of workers (World Bank, 2006). Excessive labor market flexibility is regarded having negative impact on the firm's investment decision in training and innovative activities in order to gain cost advantage over its competitors (Taymaz and Özler (2004). The positive correlation between strict employment protection and knowledge based activities is betrayed on the basis of an empirical study, which states that:

> "countries with coordinated industrial relations systems and strict employment protection tend to specialize in industries with a cumulative knowledge base because coordinated industrial relations and employment protection encourage firm-sponsored training as well as the accumulation of firm-specific competences" (Bassani and Ernst, 2002; quoted inTaymaz and Özler, 2004:4).

Likewise, Bulutay (1998) emphasizes a longer-term relationship between workers and employers produced by employment protection rules that create more investment in training of workers, improve firm-specific skill and enhance the capacity of workers to learn within the firm.

According to the opposite view, these regulations discourage job creation because they increase the cost of hiring. Besides, they increase unemployment duration by slowing down flows into and out of employment. Regulations on employment protection only provide protection for permanent workers already covered by formal labor law against the rest of worforce. They increase the stability of existing jobs at the expense of more long-term unemployment, less labor force participation and less opportunity for formal employment. Such a duality in the labor market, known as insider-outsider effect, excludes the vulnerable, 'disguised' groups of the workforce, including women and youth who are less likely to be hired in better jobs, and encourage them to look for a job in informal sector (Taymaz and Özler, 2004; World

[68] Following Monastiriotis (2003), these two components are discussed in seperate subsections under the heading of atypical employment arrangements and severance pay.

Bank, 2006). With similar reasons, TCEA has opposed EPL during the drafting of the bill. They argue that there is no need for such a bill becuase severance pay scheme already provides dismissal protection against unemployment, thus the bill would only threaten the financial viability of firms and make them reluctant to hire new workers (Şenses, 1994).

In the spotlight of the discussions about the effects of employment protection regulations on labor market performance, many studies have been trying to measure the aggregate impact of EPL on employment. The results of empirical evidence are mostly ambigous. Taymaz and Özler (2004) survey numerous empirical studies testing the effect of EPL on labor market performance. They state that most of the studies find a positive correlation between unemployment duration and the strictness of EPL, a negative correlation between flow into unemployment and the EPL index but no certain correlation between unemployment rate and the index.

> "On the one hand, higher EPL decreases hiring that makes difficult to find a new job for the unemployed, and thus increases long term unemployment. On the other hand, higher EPL also decreases firing and decreases short term unemployment. The net effect on unemployment is ambiguous" (Taymaz and Özler, 2004: 20).

Similarly, Gruber (2004) emphasizes that the impact of EPL on labor market performance which is measured on the basis of regulations on regular and temporary employment and collective dismissals is very modest in EU countries. He justifies his argument with empirical evidence that there is little effect of EPL on overall unemployment and on unemployment duration. Consistent with the results of others, Kucera (1998) finds that more generous social policies are not found to be associated with higher levels of unemployment.

OECD defines two ways providing protection for workers: inside- and outside-firm protection. "Inside-firm protection" is measured on the basis of the strictness of EPL, whereas "outside-firm protection" is scored on the basis of expenditures on active and passive labor market programs as a percentage of GDP (OECD, 2004; World Bank, 2006). The former component of outside-firm protection is a subject of supply side flexibility which is beyond the scope of this thesis. And the latter component is discussed under the title of unemployment flexibility. Insider-firm protection,

however, referring to employment protection through labor market regulations is the main concern of this section. The EPL index is scored regarding the restrictions on the use of temporary and fixed-term workers and the requirements for severance payments for regular workers (World Bank, 2006).

Many empirical studies, inspired by the OECD method derive an EPL index (e.g. Bierhanzl and Lawson, 2004; Taymaz and Özler, 2004; World Bank, 2006). Apart from the OECD method, World Bank (2006) uses Heckman-Pages[69] method to calculate the stringency of EPL index. Both methods give the same results such that Turkey, following Portugal, is the most protective country among OECD countries in terms of employment protection rules. Countries in southern Europe have also high scores, but still stay behind Turkey. Taymaz and Özler (2004) similarly cite an empirical study analyzing the degree of strictness of employment protection in 25 OECD countries including Turkey. As of the late 1990s (when the old Labor Law was in force), Turkey and Portugal had the second highest overall score among OECD countries; furthermore Turkey ranked first regarding the restrictions on the use of temporary/fixed-term contracts (Table 21).

The strictness of EPL index based on OECD methodology is composed of 18 indicators which are grouped into three areas: dismissal regulations for permanent or regular workers; regulations on fixed-term and temporary workers; and regulations on collective dismissals. The overall rating of the EPL index did not change after the passage of the new Law. Along with Portugal, Turkey still had the highest overall score as of 2004 (World Bank, 2006). With regard to the seperate components of the strictness index, there was not such an important change either. The most remarkable reduction was observed in the regular component of the index after the passage of the new Labor Law (Taymaz and Özler, 2004). The most flexible element of EPL index

[69] The main difference of the Heckman and Pages (2004) method from the OECD is that the index does not cover regulations on non-permanent contracts, and it measures employment protection in terms of the (monetary) cost of complying with regulations in dismissing a regular worker for economic reasons. The cost is calculated on the basis of the number of monthly wages required for compliance. Turkey's job security cost estimates belonging to 2004 with the OECD and Latin America figures belonging to 1999. The cost of compliance in Turkey is found higher than all OECD countries in the sample (except Portugal), but below the Latin American average. Moreover, the cost does not change with the passage of the new Labor Law (World Bank, 2006).

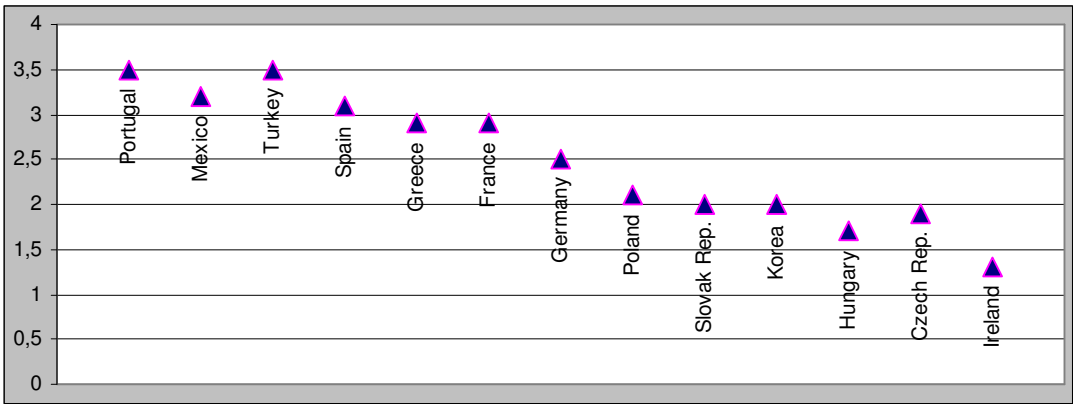
is regulations on collective dismissals such that only six of thirty countries come after Turkey (World Bank, 2006). Although the most important change the new Law introduced was flexible employment arrangements, the score of the EPL index for atypical forms of employment did not present such a substantial change that Turkey still had the highest rating among the 30 countries selected from the OECD and the EU as of 2004. This is expected to be due to the restrictions on fixed-term contracts and the lack of legal framework for temporary work agencies which will be discussed in the following subsection.

Table 21. Stringency of Employment Protection Rules by Countries, 2004 (Scale 0 to 5)

	Protection of regular workers against dismissal	Regulations on temporary forms of employment	Specific requirements for collective dismissals	Overall EPL strictness
Portugal	4,3	2,8	3,6	3,5
Mexico	2,3	4,0	3,8	3,2
Turkey	2,6	4,9	2,4	3,5
Spain	2,6	3,5	3,1	3,1
Greece	2,4	3,3	3,3	2,9
France	2,9	3,6	2,1	2,9
Germany	2,7	1,8	3,8	2,5
Poland	2,2	1,3	4,1	2,1
Slovak Rep.	3,5	0,4	2,5	2,0
Korea	2,4	1,7	1,9	2,0
Hungary	1,9	1,1	2,9	1,7
Czech Rep.	3,3	0,5	2,1	1,9
Ireland	1,6	0,6	2,4	1,3

Source: World Bank, 2006.

Figure 17. Overall EPL Strictness by the Selected OECD Countries, 2004



Source: World Bank, 2006.

On the other hand, it seems problematic to make a sound evaluation for Turkey in terms of the strictness of employment protection. One of the reasons to treat with caution in evaluating the results is the large size of informal sector in Turkey[70]. Unlike the OECD countries where the extent of informal sector is not as large, Turkey has very large informal sector masking low compliance with regulations including employment protection instruments relative to the reported figures. Given such a difference among the labor market structures, a comparison of EPL index between Turkey and the OECD loses its credibility. Moreover, most of the studies are based on the data obtained from manufacturing industry, but they do not include services and agriculture sectors constituting about 85% of total employment. Manufacturing industry is probably the most regulated and unionized sector, contrary to services and agriculture where labor market regulations hardly work. As a result, the strictness of EPL would be lower if these sectors were taken into consideration.

The findings about EPL can be summarized as follows; the empirical evidence no matter which method is used reveals that the strictness of EPL index in Turkey is quite high compared with the OECD countries. The stringency of the index merely comes from legal basis, but not from implementation given the low coverage as well as low compliance with regulations. The new Law has not considerably affected EPL scoring yet; however, the index especially its temporary component is expected to decline with the introduction of atypical arrangements.

Now that the time seems ripe to give detailed information about nonstandard employment, and later severance pay which is the last component of external numerical flexibility.

[70] 51.7% of the employees are not covered under one of the social security instutions; namely in the informal sector, and hence are not eligible to benefit from EPL and other formal instruments as well. The discussions here are concerning formal industrial relations and excluding informal sector. In other words, the Labor Law covers only wage and salary workers in urban, but not the self-employed and unpaid family workers who are mostly employed in services and agriculture. Furthermore, the new Law leaves establishments employing less than 30 workers out of job security. This additionally reduces the coverage of employment protection compared with the previous Employment Protection Law No.4473 (covering establisments employing 10 and over workers) (Taymaz and Özler, 2004).

4.2.2.2. Atypical Employment Arrangements

Regulations on nonstandard employment allow firms to hire more workers while avoiding a permanent commitment to them. There are four types of arrangements investigated under atypical employment; part-time workers[71], temporary employment, fixed-term contracts, casual and seasonal workers (including unpaid family workers and homeworkers or uncovered by any social protection, namely uncontractual relationships) (Monastiriotis, 2003). These arrangements provide employers with freedom in controlling the the size of the workforce according to the firms' needs so as to respond to demand changes more quickly, especially during bottlenecks in the economy.

On the one hand, atypical employment is deemed as reflecting worker preference, "expanding the range of employment opportunities and permitting more flexible ways of working" (Hiroki, 2001: 161). Flexible employment arrangements create hiring opportunities especially for women, first-time job seekers, retirees and the disabled. For instance, part-time work arrangements are likely to increase labor force participation of married women because permanent, whereas typical works are not appropriate for them due to their family responsibilities. On the other hand, atypical employment arrangements are regarded as "lacking in stability, and mostly involve unskilled labor, low wages and generally poor working conditions", and it can be argued that this type of employment is an obligation rather than a preference since workers take these jobs simply because they are not qualified to take a better one (Hiroki, 2001: 161).

One of the most important contributions of the new Labor Law to the flexibilization of the labor market is the recognition of flexible work arrangements as well as flexitime regulations. Previously, Turkey had no legally regulated flexible work arrangements. Other than part-time, temporary and fixed-term workers, the new Law still does not cover some modes of flexible employment regulations such as home working, subcontracting and independent work. It is too difficult to measure the

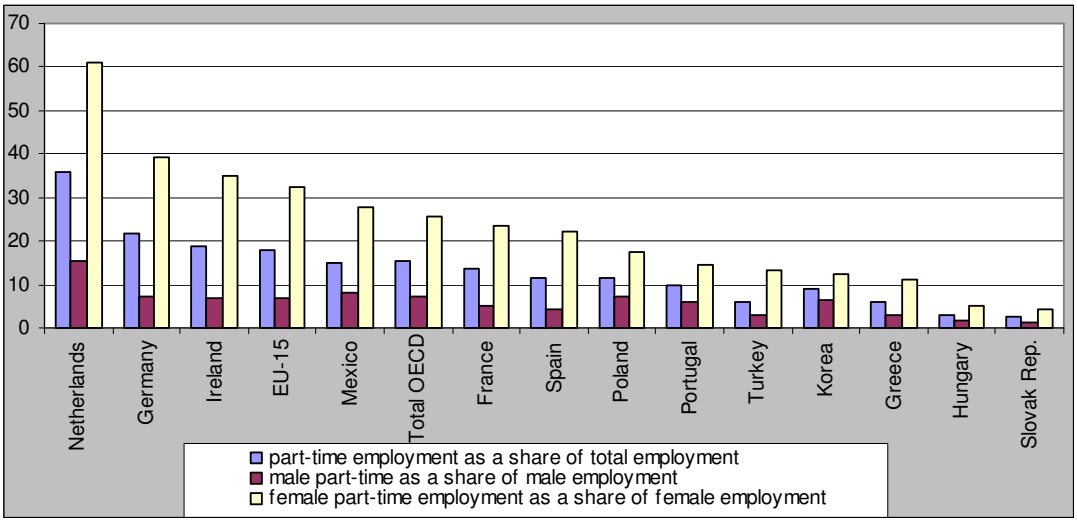
[71] Part-timing is also related to internal numerical flexibility. However, it is classified as an external numerical flexibility instead. According to Monastiriotis (2003) internal aspects of part-timing can be captured by overtime and irregular working hours.

share of these types of employment in total employment, basically due to the lack/absence of the data and their unclear definitions.

The first component of atypical employment arrangement is "**part-time employment**" which includes average of (i) the share of part-time to total employment, (ii) the share of involuntary to total part-timing (Monastiriotis, 2003:12). The distinctive charecteristic of part-time work is fewer working hours than the normal working hours of a comparable full-time worker (Labor Act No.4857, 2003: 41). The new Labor Law has provided a legal basis for part-time; however, it still does not have a wide implementation area. Considering that 41.5% of all paid workers work 50 hours or longer in a week, part-time employment is unlikely to take a significant place in total employment (Taymaz and Özler, 2004).

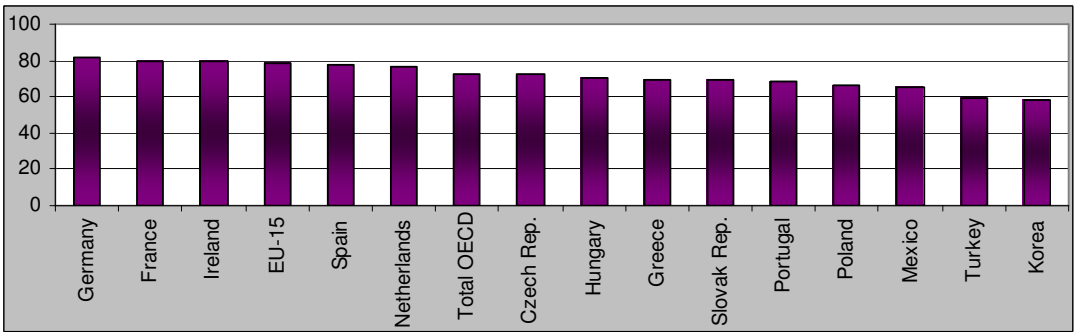
Total share of part time employment in total employment in Turkey accounting for 5.8% in 2005 is substantially low compared with most of the OECD countries. Only Slovak Republic with 2.6%, Hungary with 3.2% and Czech Republic with 3.3% stay behind Turkey, and Greece comes after with 6.1-percentage part time employment. In the rest of the OECD countries, part time employment account for more than 10% of total employment. In Netherlands, Australia, Japan and Switzerland part timing constitutes more than one fourth of total employment (Figure 18). In addition, women are more likely to work in part-time jobs; women account for 59.4% of part-time employment in Turkey, whereas men account for 40.6% in 2005. In the other OECD countries the gap between female and male share in part time employment is much wider. While female share in part time employment ranked between 70-80%, male share fluctuated around 20-25% in the OECD countries in general (OECD, 2006b). The divergence is mainly caused from the relatively lower attachment of women in Turkey to the labor market in comparison with the OECD.

Figure 18. Part-time Employment (as % of Total Employment), 2005



Source: OECD, 2006b.

Figure 19. Female Share in Part-time Employment, 2005



Source: OECD, 2006b.

"**On call work**" is regulated in Article 14 of the new Labor Law. It is defined as "employment relationship which foresees the performance of work by the employee upon the emergence of the need for his services, as agreed to in the written employment contract, qualifies as a part-time employment contract based on work on call" (Labor Act No.4857, 2003: 44). The article stipulates that the duration of work has to be 20 hours, and at least four hours have to be sequent in a day unless otherwise is specified by the parties. Furthermore, employees have to be informed of beginning of the workday at least before four days.

"**Temporary employment**" refers to the type of employment relationship which does not last longer than 30 working days (Labor Act No.4857, 2003: 35). These arrangements have three parties; "user firm, interim work agency and temporary worker" (Ercan and Tansel, 2006: 10). The agency serves as a mediator such that the contract is signed between the worker and the agency and finds a job for the worker to meet the labor demand of the user firm. Turkey did not legally recognize temporary employment relationship until the new Law came into force. (Taymaz and Özler, 2004). However, Turkey's ranking remained relatively high among OECD countries in terms of temporary employment component of the EPL index as of 2003 (World Bank, 2006).

Table 22. Proportion of Employees with Temporary Contracts (as of 1st Quarter of 2006)

	Total	Men	Women
Spain	33,3	31,3	36,1
Poland	25,4	26,2	24,6
Portugal	19,2	18,2	20,4
Netherlands	15,7	14,7	16,8
Sweden	15,3	13,4	17,2
Finland	14,4	10,4	18,2
Germany	14,2	14,4	13,9
France	12,7	12,3	13,2
Greece	9,5	8,1	11,6
Denmark	9,1	8,5	9,7
Czech Rep.	8,2	7,0	9,7
Hungary	5,8	6,3	5,4
UK	5,6	4,8	6,4
Slovakia Rep.	4,4	4,3	4,5
Ireland	2,8	2,5	3,2
Turkey*	**13,0**	**12,6**	**13,4**
Euro Area	16,0	15,3	17,0
EU-25	14,2	13,7	14,9

* OECD, Family Database, 2007. (Data on temporary employment concerns the incidence in dependent employment as of 2005)

Source: EUROSTAT, EU-Labor Force Statistics, 2006..

Table 22 illustrates the proportion of temporary workers in total employment. Spain is at the first rank with 33.3% of temporary employment, while Ireland is the last with a negligeble share of 2.8% as of 1st quarter of 2006. The case of Ireland is striking, because it has the highest proportion of part-time employment. The

Netherlands and Germany which have the highest share of part-timing takes place in the middle of the schedule. Turkey is slightly below the average of EU-25; the incidence of temporary employment was 13% in total, and female temporary employment accounted for 13.4%[72]. Women's share in temporary employment is higher than men as is the case of part-time employment (Table 22). It can not be generalized that all forms of atypical employment concentrate in the same country range. However, the general rule is that women take a larger portion from all forms of atypical employment relative to men.

Another relevant issue concerning temporary work is the legal framework of "temporary work agencies". There is an overall trend in the OECD to extend the legality of temporary work agencies, and Mexico and Turkey are the only countries in the OECD where temporary work agencies are not legalized (World Bank, 2006). The changes introduced by the new Labor Law enable many forms of atypical employment, and thus it is expected to reduce strictness of EPL for temporary employment in the coming years. However, if the new Law provided the legal basis for temporary work agencies, the stringency of EPL index would have been much lower (Taymaz and Özler, 2004).

The last type of nonstandard employment to be discussed here is "**fixed-term contracted employment**". As indicated in Article 11, the term refers to "an employment contract for a definite period between employer and employees in written form for a specified term or a contract based on the emergence of objective conditions like the completion of a certain work or the materialisation of a certain event" (Labor Act No.4857, 2003: 36). Article 12 stipulates that fixed-term workers should not be discriminated against because they are not subject to a permanent employment relationship as is in the provision of Article 13 concerning part-time workers (Labor Act No.4857, 2003: 39-40). In addition, a fixed term employment contract shall not be terminated more than once, except when there is an essential reason to require chain (repeated) contracts. Chain contracts based on essential reasons shall maintain their status as definite contracts (Labor Act No.4857, 2003:

[72] EUROSTAT publishes the share of workers with temporary contracts for European countries; however, Turkey is generally not included in the dataset.

36-39). The Law is not expected to provide sufficient safeguards to protect fixed-term employment since it does not stipulate any limitation on the cumulative duration, but on the number of renewal of the contracts (Taymaz and Özler, 2004). There is not a minimum job tenure requirement to arrange such a contract. Work contracts over one year have to be made in writing. Among OECD countries, only Turkey and Greece allow fixed-term contracts as far as the objective reasons exist. Others generally do not require any objective reason to permit or conclude the contract (World Bank, 2006)[73].

After all, there is an increasing trend in OECD countries to legitimize atypical employment relationships, and Turkey is not an exception. Atypical employment arrangements have been recognized too late to Turkey relative to other OECD countries, and accordingly they are not yet very common in application. On the other hand, the number of atypical workers should be much more than the reported figures considering the size of the unrecorded employment. This estimation is based on the fact that a great deal of fixed term and temporary employment is not covered by any social security scheme. World Bank (2006) exemplifies the accession to formal social protection for these two types of employment arragements by 2002 HLFS statistics. It is reported that only 46.7% of fixed term and temporary workers are covered by a social security scheme. If those uncovered workers are included in the estimation, flexibility of the labor market in terms of use of atypical work arrangements would increase[74]. For these reasons it is not easy to reach a conclusion about the actual size of atypical employment in Turkey. In brief, neither legitimization of atypical work arrangements indicates a flexible labor market in terms of external numerical flexiblity, nor the small number of atypical workers points out inflexiblity.

[73] To find data concerning fixed-term contractual labor relations is a rather problematic issue relative to other kinds of atypical employment in the absence of regular record. Therefore, the explanations related to fixed term employment arrangement could not be based on quantitative findings; they are mostly dependent on the previous literature and the legislation.

[74] In addition, there has recently been an increase in the number of contractual workers who are not covered by job security. Lack of job security is attrituble to higher flexibility. Even the public sector has been relying on more contractual work arrangements instead of permanent staff. Accordingly, the EPL index is likely to be overestimated if the practical applications are taken into account.

4.2.2.3. Severance Pay

Severance pay known as dismissal protection is the oldest and the broadest instrument of passive labor market policies in Turkey[75]. Severance compensation is defined by the Labor Law as the lump-sum payment to a worker if he worked for at least one year and if his labor contract is ended in the event of death, worker's termination of employment with a valid reason such as compulsory military service, old age retirement, disability, female worker's giving up her position due to marriage or employer's termination of employment except for disciplinary reasons (Tunalı, 2003; Ercan and Tansel, 2006).

As in the case of other labor market regulations, there are opponents and proponents of severance pay requirement in terms of its relationship to employment creation. For the opponents, easing regulations on severance requirements for regular employment is considered to encourage job creation in formal sector, increase labor force participation of disguised groups and compliance with the law. High level of severance payments are regarded having an adverse role in employment creation, because employers prefer to shift to overtime work rather than to hire additional workers in order not to incur firing difficulties. This results in less new employment (Bulutay, 1995).

From the proponents' perspective, Bulutay (1998) hardly indicates empirical evidence which addresses a direct relationship between severance pay and employment generation. On the contrary, he talks about the positive effects of severance pay on labor market performance by reducing layoffs and helping to internalize the externality. Moreover, severance payments are required to provide job

[75] Severance pay is also an element of non-wage cost, and thus affects labor cost flexiblity as well. For instance, Bulutay (1998) discusses severance pay under the heading of non-wage cost flexibility. Severance payments were the only widely-used passive labor market measure in Turkey until the end of 1998. After then two other passive labor market measures were introduced to Turkey; unemployment insurance system as discussed previously and job loss compensation. The latter is regulated by Law No. 4046 on the Regulation of Privatization Applications. According to this Law displaced workers in State Owned Enterprises are paid privatization compensation in addition to the severance payments. The amount of compensation depends on the service period and last month's wages as is the case of other two measures (Tunalı, 2003).

security especially in the absence/lack of unemployment insurance system as is the case in Turkey (Onaran, 2004).

Severance requirement is composed of seniority payment and notice payment. "Seniority payment" is equal to a thirty-day salary for every year of service at the same work place unless otherwise is specified by an agreement. The annual amount of the seniority payment can not exceed the amount of the retirement bonus of the highest-paid civil servant (Tunalı, 2003; Ercan and Tansel, 2006). The second component of severance compensation is "advanced notice payment" referring to wages paid to a fired worker for the certain period determined under notice requirement at the initiative of employers. Notice payment and notice period depend on the length of service period. If the service period is less then 6 months, the notice period is 2 weeks; if tenure is between 6-18 months, the period is 4 weeks; if tenure is between 18-36 months, the period is 6 weeks; and if it is more than 36 months, then period is 8 weeks. Both components of the compensation can be increased in accordance with an individual or collective agreement (Togan and Özyıldırım, 1997; Tunalı, 2003).

Only employees who have been working for a minimum six months in establishments with at least 30 workers and who are employed under an indefinite contract can benefit from severance payments. A similar requirement also took place in the previous Law,yet covering the establishments with at least 10 workers.[76]. Small establishments are not covered by the increased job security, and thus it is easier to abolish severance requirements in the absence of any provision regulating job security. Since an employee working in a small establishment is not covered by increased job security provisions, they may be dismissed due to any reason without stating a just cause, and the employer has not to notify the reason of dismissal. If there is an abusive dismissal, the worker is responsible for prooving the abuse (Ercan and Tansel, 2006: 11). This gives more flexibility to the employers in small establishments.

[76] As definition of small establishment is enlarged to 30 workers by the new Act; higher number of workers is unlikely to get severance payment even if they are dismissed without a just cause. This is an important factor increasing flexibility of the labor market.

On the contrary, workers covered by increased job security can not be dismissed without a valid reason, and the employer has to notify the reason for termination of employment to the worker in writing. If there is an abuse in the dismissal, this time, employer has to prove the valid reason of the dismissal. Only in the event of the valid reasons, workers can not demand severance payment. The Law, however, recognizes some flexibility to employers by not stating a definite description of compelling reasons which may result from lack of capacity of workers, or from operational needs of the work place (Ercan and Tansel, 2006). This provision involves such a flexibility that can easily be turned against employees. In recessions severance payments were abolished easily and workers could not fight for their rights since the balance of power relations is against them.

In other words, existing severance compensation will remain until such a new fund is established (Ercan and Tansel, 2006; World Bank, 2006). The targeted amendment in the concerning provisions of the Labor Law was dated after the enforcement date of insurance benefit system. That is in part due to the inverse relationship between the level of severance pay and the generosity unemployment benefits[77] (Blanchard, 2002 quoted in Taymaz and Özler, 2004).

After the amendments of the related provisions with the new Law, as it is observed in the table below that there is a significant reduction in the regular component of the EPL index mainly due to easing of severance requirements. In this context, Taymaz and Özler (2004:19) present a detailed list of EPL indicators for regular employment and emphasize that "Turkey had higher scores mainly because of high severance payments after 4 and 20 years of tenure, trial period before the eligibility arises and unfair dismissal compensation (20 years of tenure)".

[77] Severance pay is regarded as a safeguard against unemployment in the absence of an unemployment insurace scheme. After Unemployment Insurance System is legistlated in 1999 and started to provide benefits as of 2002, the new Labor Law including amendments related to provisions on severance pay was enacted in 2003. Then, it became easier to change the provisions on severance pay because there is ever a new protection scheme that can close the gap of severance compensation by providing protection for the unemployed (Taymaz and Özler, 2004).

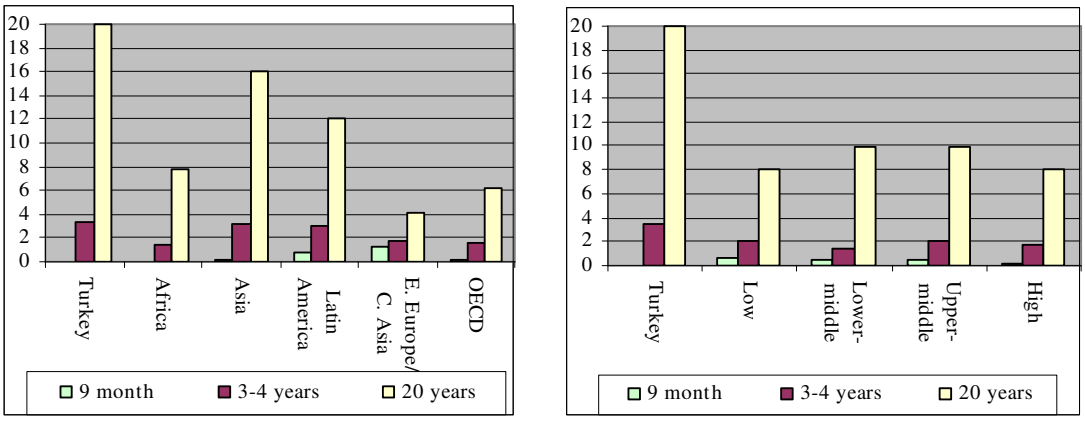
Table 23. EPL Index for Regular Employment (in Terms of Severance Pay Requirement)

(Scale 0 to 6)	Law No.1475	Law No.4857
Severance pay after		
9 months	0	0
4 years	6	0
20 years	6	0
trial period before eligibility arises	5	5
unfair dismissal compensation (20 years)	5	1

Source: Taymaz and Özler, 2004.

The EPL index for regular employment can be an indicator to compare the level of severance payments in Turkey with OECD countries. Turkey is grouped into upper-middle income country and into Eastern Europe/Central Asia (ECA). Taymaz and Özler (2004) emphasize that in Turkey, severance payments sharply increase after 4 years, especially after 20 years. Although duration of job tenure is also highly determinant in other countries in terms of severance pay generosity, the pay gap between 4- and 20-service periods is not as wide as in Turkey. Even the highest multiple of monthly wage paid in severance at 20-year length of service is in Turkey among the selected countries (World Bank, 2006).

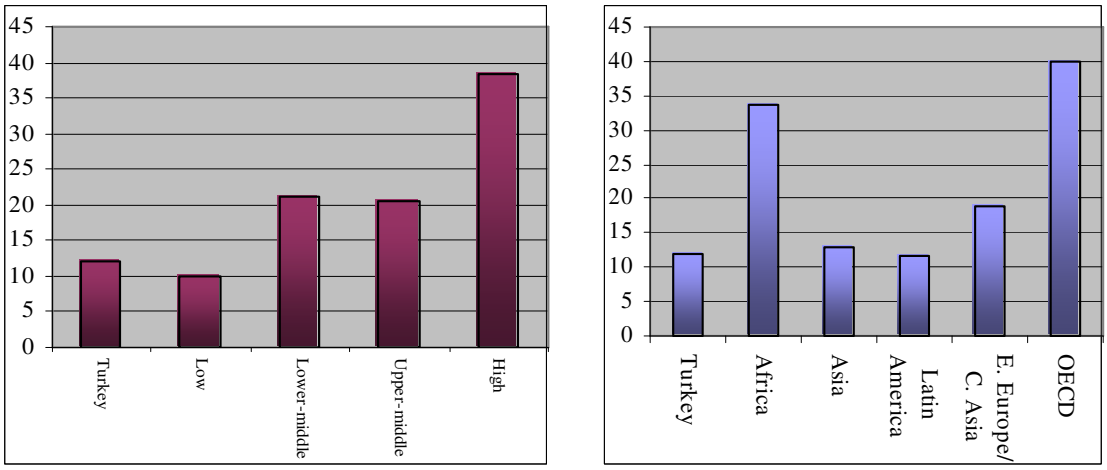
Figure 20. Severance Pay Generosity at Selected Service Periods (Multiples of Wage Paid in Severance)



Source: World Bank, 2006.

With regard to minimum job tenure for severance pay eligibility, workers who have completed at least 12-month service period can benefit from severance pay in Turkey, whereas the averages for upper middle income countries (about 21 months) as well as lower-middle and high income countries are much higher. As to the minimum length of service requirement by regions; Turkey, though regarded as an Eastern Europe/Central Asian country, ranks among Asian and Latin American countries, and below the averages for ECA, Africa and the OECD.

Figure 21. Minimum Number of Months for Severance Pay Eligibility



Source: World Bank, 2006.

While discussing the impact of severance payments on employment, it would be misleading to evaluate flexibility of the labor market on the basis of legal provisions regardless of enforcement and implementation of the Law. It is important to answer to what extent severance compensation fund works in practice given the existence of several ways employers in private formal sector apply to evade severance requirements. For instance, according to the Law severance payments have a sharp increase after five years-period of service. Many employers put pressure on workers to quit job before five years in turn to hire them again (Onaran, 2004).

CHAPTER 5

CONCLUDING REMARKS

Turkey has hardly experienced a well-performing labor market since 1980. In particular after the crisis in 2001, employment performance has been rather poor despite a rapid recovery in output growth. Unemployment rate which was on a plateu of 6% before the crisis has remained around 10% thereafter. The post-crises period of the Turkish economy portrays a picture where high output growth contrasts with insufficient job creation to reduce unemployment. What the Turkish economy has been experiencing, is the phenomenon labeled as "jobless growth".

The flexibility-approach takes its root from the neoclassical theory and regards labor market rigidities as the main reason for the incapability of the economy to create new jobs. In this regard, this thesis has examined whether the labor market rigidities in Turkey are the main factors behind the poor employment performance, as the mainstream view claims. The analysis on the relative stringency of Turkish labor market has been conducted in comparison with the OECD countries. In addition, to be able to analyze whether there is a tendency towards flexibility in terms of the legislative framework, a comparative analysis between the previous and the current Labor Acts has been utilized.

After outlining the recent developments in the Turkish labor market indicators related to demographic charesteristics, labor force participation, employment and unemployment, this thesis has analyzed a set of flexibility indicators to determine the existing rigidities in the Turkish labor market. The observations based on both quantitative findings and legal provisions have indicated that labor market flexibility in general has increased more or less throughout the period after 1980s. Despite this general upward trend, not all elements of flexibility moved in the same direction at all times. Since the analysis in this thesis has not included a construction of an aggregate flexibility index, it is not possible to provide a quantitative conclusion on

the flexibility or the inflexibility of the Turkish labor market. In accordance with expectations, some of the labor market indicators have been observed to be more flexible, while others have stayed relatively inflexible. With the exception of non-wage costs; and ambiguous evidence on minimum wages, the duration of unemployment insurance benefit and temporary component of the EPL index, there is little solid evidence that high unemployment results from labor market rigidities.

Considering the first component of labor cost flexibility, rigidity is not observed in real wages in Turkish labor market. On the contrary, a significant degree of downward flexibility in real wages has played a significant role in the adjustment of the economy to demand changes. A comparison of the long-run trend in real wage index and unemployment rate displays a weak correlation from wages to unemployment. On the other hand, unemployment is a rather significant determinant of wages. The negative effect of unemployment on wages creates a flexible wage setting mechanism where workers accept deterioration of their real wages in order to continue being employed. The significance of power relations in determining the relationship between wages and unemployment is explained by Marxian reserve army of labor hypothesis. The drastic change in the balance of power relations at the expense of labor after 1980, points to a turning point in the labor market conditions leading to a higher degree of wage flexibility. The cyclical behaviour of real wages has confirmed the negative correlation between lower bargaining power and higher wage flexibility. Indeed, fall in real wages has hardly played a role in job creation throughout the period, it merely helps the currently employed to protect their jobs. In addition to the existence of reserve army, the fragmented structure of labor market also plays a significant role in wage flexibility. In other words, increased labor market segmentation tends to be associated with higher wage flexibility.

The nonwage costs constitute a remarkable weight on the Turkish labor market. One of the main indicators of nonwage cost “tax wedge” is substantially high in Turkey compared to other OECD countries. In addition, declining trend in net wages and uptrend in deduction rate from labor cost, indicate increasing tax burden on employment over the years. On the basis of available research it may be suggested that high taxes on labor are one of the main causes for poor employment

performance in Turkey. High tax burden on employment also justifies the concerns about the adverse effects of taxes on creating employment in the formal market and hence encouraging informalization.

With regard to the union flexibility, one may infer that, in line with the change in political attitude towards labor issues in the post-1980 period, union flexibility has increased substantially, as union density and union coverage have decreased. Unionization rate is substantially low in Turkey relative to many OECD countries. For these reasons, trade unions should not be regarded as a rigidity factor in the Turkish labor market.

Last of all, the New Labor Law, which came into force in 2003, has introduced a number of changes establishing flexitime arrangements and flexible employment relationships. *De jure* regulations on flexitime arrangements are likely to increase internal numerical flexibility. Indeed, the implementation area of working time flexibility is not restricted to the legal texts; it is rather prevalent in practice. Irregularity in working time is more widely practised in the informal sector without a legal basis. Therefore, internal numerical flexibility is expected to be higher than officially estimated. Besides, the trend in actual working hours in the last two decades reveals flexibilization in working hours. Firms have been relying more on longer working hours over the years. Turkey ranks first among OECD countries, by leaving behind even Korea, a country that has a reputation for long working hours.

In conclusion, flexible labor markets do not necessarily bring about a well-performing labor market. Given the lack of reliable data, the findings of the current study should be interpreted with caution; however, through these findings it may be suggested that Turkish labor market, despite some rigidities, can not be characterized overall as an inflexible market. Furthermore, the limited number of regulations, and in cases where regulations exist, the limited degree of compliance leave little room for the arguments, which explain high rate of unemployment or poor employment creation performance of the labor market by the so-called rigidities. It can be asserted that even if substantial progress is achieved in employment creation, this progress could solve unemployment problem to a great extent, however not remove

all labor market imbalances. The large number of unskilled labor in urban areas dropping out of agriculture, very low female participation especially in urban areas, the large size of informal employment etc. would still remain as major challenges.

If the rigidities are not mainly responsible for low employment creation, then why the Turkish labor market is in such a poor performance? Or if flexibilization does not seem to overcome the main challenges in the labor market, what should be done to overcome these bottlenecks? Given the forementioned challenges in the labor market, special attention should be paid to the supply side of labor rather than the demand side. Lack of industrial development, lack of physical and human capital investment, lack of productivity growth based on technological progress etc. diverge the economic growth from employment creation perspective. There is an urgent need for an employment policy package to go beyond the demand side. In this regard, the hope is that this thesis opens further avenues into more detailed discussions on tackling those challenges and developing policy implications.

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APPENDICES

APPENDIX-A

01.07.2007- 31.12.2007

CALCULATION OF NET MINIMUM WAGE FOR THE WORKERS ABOVE 16 YEARS OF AGE (TRY/Month)	
Minimum Wage	**585,00**
SSI Premium % 14	**81,90**
Unemployment Insurance Fund % 1	**5,85**
Income tax %15	**74,59**
Stamp tax % 06	**3,51**
Total Reductions	**165,85**
NET MINIMUM WAGE	**419,15**

COST TO THE EMPLOYER (YTL/AY)	
Minimum Wage	**585,00**
SSI Premium % 19.5 (Contribution of Employer)	**114,08**
Contribution of Employer to the Unemployment Insurance Fund % 2	**11,70**
TOTAL COST TO THE EMPLOYER	**710,78**

CALCULATION OF NET MINIMUM WAGE	
Minimum Wage	**585,00**
SSI Premium % 14	**81,90**
Unemployment Insurance Fund % 1	**5,85**
Total Reductions	**87,75**
NET MINIMUM WAGE	**497,25**

Source: MLSS, July 2007.

Tax wedge, the sum of contributions of employer and employee plus income tax, may be calculated by following steps on the basis of the minimum wage cost indicated above:

Tax Wedge = (Total Labor Cost – Net Min. Wage – Employer's and Employee's Contributions to Unemp. Ins. Fund– Stamp Tax) / (Nominal Min. Wage)

1. step: 710,78 – 419,15 = 291,63
2. step: 291,63 – (11,75+5,85) = 274,03
3. step: 274,03 – 3,51 = 270,52
4. step: (270,52 / 585,00)*100 = **46,2 %**

APPENDIX-B

a) Initial net replacement rate is an average of cases of a single person and one-earner married couple, an average of cases with no children and with two children, and an average of cases with previous earnings in work 67% of average production worker (APW) level, 100% of APW level and 150% of of APW level. Typical-case calculations relate to a 40-year-old worker who has been making contributions continuously since age 18. Net income out of work includes means-tested benefits (housing benefits are calculated assuming housing costs are 20% of APW earnings) where relevant but not non-categorical social assistance benefits. Taxes payable are determined in relation to annualised benefit values (i.e. monthly values multiplied by 12), even if the maximum benefit duration is shorter than 12 months.

b) Duration is shown as zero for Austraila and New Zealand since they do not operate unemployment insurance schemes. The net replacement rates in the first column for these two countries reflect means-tested unemployment benefits which are not subject to a time limit.

c) Months equivalent initial rate for the Czech Republic, the Slovak Republic and Spain where the benefit level declines during the unemployment insurance period (e.g. for Spain, where the nominal replacement rate declines from 70% to 60% after six months, the months equivalent initial rate is calculated as six months plus 6/7ths of 18 months).

d) As note (a) except that the net replacement rates are averaged over five years of unemployment, the three previous earnings levels considered are 67%, 100%, and 150% of the average wage (all workers), and non-categorical social assistance benefits are included in out-of-work net income. Values in brackets are percentage point changes between 1995 and 2004, which are only available for a small number of countries. Data for Korea and New Zealand correspond to 2001.

Source: OECD, Employment Outlook, 2006:60.